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AUTHOR: Nicole Curley

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Leslie Mauerman
PROJECT COMMITTEE CHAIR

Kristen Westrop
PROJECT COMMITTEE MEMBER

SIGNATURE

DATE

SIGNATURE

DATE

SIGNATURE

DATE
IEP Goal Based Progress Monitoring Web Resource

Nicole Kira Jacklyn Curley

California State University, San Marcos

August 3, 2012
THESIS ABSTRACT

Data collected through subjective methods of the monitoring of Individualized Education Plan (IEP) goals lead to inconsistent perceptions of student performance levels by education specialists and IEP placement teams. This discrepancy compelled this researcher to: (a) investigate existing progress monitoring procedures education specialists use to assess IEP goal mastery; and (b) establish a website, aligned to California State Standards Based IEP Goals, with materials and resources for special educators to utilize for improved consistency in monitoring and communicating student annual IEP goal progress.

Through literature review, Curriculum Based Measurement (CBM) was established as the progress monitoring routine utilized most successfully and frequently to observe student improvement during skill-based fluency probes. Since consistent CBM probes are proven to prompt instructional change, the researcher employed a similar concept for evaluating student progress on standards based IEP goals. The IEP Goal Based Web Resource was created using California State Standards based IEP goals for English Language Arts, grades two through five. The materials for specialists to utilize include word lists, reading fluency charts, vocabulary activities and reading comprehension graphic organizers. The researcher conducted an anonymous survey seeking feedback regarding the IEP Goal Based Web Resource. Education Specialists who serve students with mild/moderate disabilities participated in the survey, yielding results which guided the website product.

Survey results suggested that other education specialists feel that current progress monitoring strategies are somewhat subjective and inconsistent with other specialists
within the same school district. One hundred percent (100%) of survey participants concurred that this type of IEP Goal Based Web Resource is beneficial for consistent monitoring and communication of student performance. These results support the view that education specialists can utilize this resource which provides for continuity amongst assessors, the outcome of which ensures greater consistency and objectivity when assessing student progress towards annual IEP goals, thus promoting consistent instruction and greater student success.

KEYWORDS: IEP goals, goal mastery, progress monitoring, standards based
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Chapter One: IEP Goal Based Progress Monitoring Web Resource

Statement of Problem and Rationale

Individualized Education Plans (IEPs) are legally mandated documents created by a team, designed to delineate services, accommodations, modifications and individualized goals for students who qualify through extensive assessment, as eligible to receive for special education services. IEPs are intended to describe an individual student’s present levels of academic achievement and to determine and outline specific goals that are the core of his or her educational program. The goals are evaluated through continuous progress monitoring and revised on an annual basis, based upon student performance. Although IEPs are designed to maximize student learning, according to Mattatall (2011), the goals are often vague which results in a struggle for teachers to utilize IEP goals as a tool to support and enhance student learning as well as monitor goal progress.

One key reason that educators struggle to effectively evaluate goal mastery and to make sound educational decisions for their students is the lack of an objective progress monitoring system. Fuchs, Deno and Mirkin (1984) found that when education specialists evaluate IEP goal mastery without an objective monitoring system in place, they often employed an unsystematic observational approach and teacher-made tests, leading to “optimistic judgments of achievement” (p. 450). Subjective monitoring of IEP goals causes inconsistency with the communication of IEP goal progress and present levels of performance for both the student and the teacher.

From this researcher’s personal experience, it has been observed that not only are the progress monitoring systems inconsistent, but the resources and materials used to gauge goal progress vary greatly from classroom to classroom, site to site, and district to district. Newly
hired teachers are spending remarkable amounts of time creating their own teacher-made tests and activities to monitor goal progress. Similarly, there is a lack of consistency between materials used by education specialists within the same school district. From this researcher’s observation and findings, there is not adequate communication or sharing of resources among education specialists in the researcher’s district. One reason this discrepancy may occur is that education specialists at each school site provide services to students in different grade levels, and the demands of each caseload are unique. This uniqueness serves to discourage communication and resource sharing among specialists in this researcher’s school district.

Problems arise when education specialists utilize different assessment tools and activities to monitor progress for the same performance goal at the same grade level. Fuchs, Deno and Mirkin (1984) reveal subjective teacher-made assessments have been observed as inconsistent. This inconsistent criteria and resulting measurement can result in a student meeting an IEP goal in one classroom, but in a different class, with different monitoring tools, the student may not meet that same IEP goal. This ongoing practice of using divergent assessment tools and the lack of uniformity in evaluations between education specialists leads to inconsistent monitoring of IEP goals. Etscheidt (2006) states:

Progress monitoring is essential to evaluating the appropriateness of a child’s IEP, yet many teams fail to develop or implement progress-monitoring plans, or use inappropriate measures to determine student progress. Those teams that do include progress monitoring often do not meet federal requirements, or their practices do not provide meaningful data. (p. 56).

However, if a district wide resource were readily available from which education specialists could draw in order to monitor and evaluate IEP goal mastery, consistently there is a better chance of reliability, uniformity and regularity in evaluating how well students meet their IEP goals.
Education specialists, families and students can all benefit from a consistent IEP goal monitoring system, in any given school system. Education specialists benefit from this resource by spending less time creating teacher-made activities and assessments to monitor goal progress. These educators can also be more confident in performance reliability when evaluating whether a student has mastered an IEP goal. Furthermore, a consistent, district wide IEP monitoring system provides a valuable element of uniformity in communication between educators, students and families. This consistency would be particularly beneficial to students because consistent measures, which are directly aligned to instruction, serve and abridge for those who move between grade levels or school sites. Parents benefit from this resource they will become accustomed to the same materials being used to monitor their child’s performance on annual IEP goals.

**Research Questions**

In order to better monitor IEP goal mastery, education specialists need an objective system for consistent progress monitoring. The question addressed in the literature review is, “What objective progress monitoring and data collection strategies for IEP goal evaluation currently exist among education specialists?” Once it is determined what, if any, effective, objective tools and methods are currently being utilized, a web based resource for education specialists, utilizing these tools, can be created. Careful selection and editing of the currently utilized and effective tools is anticipated to align the web-based resource to California State Standards and to an existing IEP goal bank. This web-based resource can be made available to all education specialists in this researcher’s district.

The specific questions the researcher plans to evaluate with the implementation of the *IEP Goal Based Progress Monitoring Resource* are: (1) Is this web-based IEP goal monitoring
resource database a useful tool for consistent evaluation? And (2) Will this web-resource improve communication of IEP goal progress among teachers, administrators, students and families?

**Special Education Related Terms**

This section is designed to describe in detail the various acronyms and academic jargon that will be used throughout this research study. Some of the terms are specific to special education while others give background information to existing progress monitoring strategies being used by educators.

**Individualized Education Plan Web Based Goal Banks**

IEP goal banks are available to education specialists when writing Individualized Education Plans. Some goal banks are distributed via stand-alone software while others are web-based. The goals available to education specialists must be aligned to state standards and modified for each individual student based upon his or her present levels of performance as well as academic and social needs.

Kowalski, McCall, Aiello and Lieberman discuss the advantages and disadvantages to web-based IEP goal banks in their 2009 study. Advantages and disadvantages are important to examine and analyze prior to creating a web-based IEP goal progress monitoring resource so this researcher understands the benefits and flaws of a “cookie cutter” education specialist resource. Advantages include accessibility, efficiency, comprehensive scope and flexibility. A web-based IEP goal bank is accessible via the Internet, and a list is readily available with standards based goals easy to edit and modify without the chore of creating a goal. However, the primary disadvantage of such a system is its tendency to foster generic goals that, if not modified do not meet the individualized nature required from an IEP.
Data-Based Program Modification (DBPM)

Data-Based Program Modification (DBPM) is a systematic method for individualizing education plans for children receiving special education services. This assessment system evaluates individual goal progress through frequent testing and continuous evaluation. Deno & Mirkin (1983) developed DBPM to enable collaboration between education specialists and general education teachers in order to assist with the development of educational programs for special education students included in the general education environment. DBPM provides alternative evaluation solutions for students with learning differences.

The DBPM process, as outlined by Deno & Mirkin (1983), opens with individualized data gathering by educators to address a specific goal. First, the student’s current level of performance is evaluated and a discrepancy between that student’s current performance level and the expected performance level is determined. Deno & Mirkin note the expected performance level is based upon, “the student’s academic behavior in relation to the regular classroom” (1983, p. 29). Alternative instructional strategies are designed. As the intervention is implemented, results are evaluated to determine effectiveness of the intervention. Educational decisions are made to continue or change the intervention. Since progress and program recommendations are based upon student performance on curriculum tasks, educators can determine if the intervention is effective in bridging the performance discrepancy gap.

Fuchs, Deno & Mirkin (1984) describe DBPM as a process designed to measure student performance on annual, long range goals, as opposed to short-term objectives. By using DBPM, educators are made aware of the time when an instructional change is to be introduced into the student’s programs. DBPM procedures are derived from curriculum-based IEP goals
and date ranges for expected proficiency (weekly rates). This process is often used in conjunction with Curriculum Based Measurement procedures.

Curriculum Based Measurement

Like DBPM, Curriculum Based Measurement (CBM) is an objective method for goal progress monitoring and evaluation. Matattall (2011) describes CBM as fluency tasks that measure the student’s cognitive performance and ability to perform a task quickly and accurately. Fluency measures in CBM can be used to determine oral reading fluency, mathematical operations, and written expression. The measure of a student’s fluency in particular tasks is expected to be a “good measure of his or her competence in a subject area” (Matattall, 2011, p. 64). CBM is an effective monitoring tool because the procedures identify a baseline of performance for particular students, against which their own progress can be measured. The students are frequently monitored and results are graphed to determine their slope of progress. The slope is used to determine if students are “on track” toward meeting their goals.

Curriculum Based Measurement is often used for IEP goal writing because benchmarks can easily be turned into an annual goal with expected short-term objectives for increased weekly fluency gains. CBM is not only used with education specialists, but has also been implemented to assess students school wide to measure whether a school site is working towards Adequate Yearly Progress (AYP).

Adequate Yearly Progress (AYP)

Fuchs and Fuchs (2004) the founders of Curriculum Based Measurement, describe the benefits to introducing CBM on a school-wide scale. One positive to school-wide CBM is that probes can be used to determine adequate yearly progress (AYP) a mandate of No Child Left
Behind (2001). AYP, through No Child Left Behind (NCLB) “requires all third-eighth grade public school students become proficient in mathematics and reading by 2013-2014…in the meantime, schools must show they are on track toward achieving this universal proficiency deadline by meeting an annual minimal growth rate” (Fuchs & Fuchs, 2004, p. 26). Scores on the assessments act as indicators of achievement within that academic domain (reading, writing, mathematics). Graphing scores and results from CBM fluency probes administered throughout the school year lead to a slope of progress (rate of improvement), which can be used to show the school’s minimum growth rate necessary to meet AYP.

Response to Intervention (RtI)

Response to Intervention (RtI) is another procedure many schools are using to comply with NCLB. As a result of the legislation, schools are required to determine whether their instructional practices and interventions are data-based. This mandate has led schools to make educational decisions and changes to implemented interventions based on the results of frequent progress monitoring. The RtI model is often used to monitor and screen student progress as well as to pre-identify students who may have specific learning disabilities. There are three tiers to the RtI model. The first tier meets the needs of the majority of the school population receiving instruction in the core curriculum. Those students who are determined to need and benefit from more strategic and intensive intervention comprise the top two tiers.

In order to achieve a formative evaluation and baseline for students, some schools use CBM as a model for screening and frequent progress monitoring to determine the effectiveness for an instructional program. Lembke, Garman, Deno and Stecker (2010) found “the short-duration CBM passage reading measures used for screening were highly related to other measures of student performance” (p. 370).
Least Restrictive Environment: Mainstream and Inclusive Education and the Five Step Inclusive Grading Model

The pendulum of professional opinion seems to swing back and forth regarding the issue of students with special needs being “mainstreamed” or “included” in general education classes. Inclusion is clearly the current preference, as evidenced by the federal requirement that all students be educated in the least restrictive environment (LRE) as mandated by the Individuals with Disabilities Education Act of 2004. Different service models for students with special needs vary depending on the students’ least restrictive environment (LRE). The least restrictive environment is the setting in which the student has the best opportunity to be educated with non-disabled peers, to the greatest extent possible. Depending on severity of the students’ disability, he or she may be mainstreamed in a general education classroom for part of the school day, with specialized academic instruction provided by education specialist who either “pushes into” the classroom or pulls the student out for small group instruction in a separate location. Students with more severe disabilities may be in a separate classroom for much of their school day. When students with special needs are being instructed within the general education classroom, it is referred to as the “Inclusion Model.”

Guskey & Jung (2009) note that with an inclusion model, many students with special needs are included in the general classroom and expected to work towards not only IEP goals at their ability level, but also grade-level standards. These researchers developed a system for grade reporting based upon product, process and progress criteria. Educators often “vary the criteria they employ from student to student, taking into account individual circumstances…although teachers do this in an effort to be fair, the result is a hodgepodge grade that is difficult for parents or students to interpret” (Guskey & Jung, 2009, p. 56). In response to
this “hodgepodge” approach, Guskey and Jung developed the *Five-Step Inclusive Grading Model*. The five steps of the model, intended to better meet the needs of students with special needs mainstreamed and included in the general education environment, are:

1. Establish clear standards for student learning that distinguish product, process and progress goals.  
2. Determine if each standard needs to be adapted for the student.  
3. Determine if that adaptation requires an accommodation or modification.  
4. Develop appropriate modified standard.  
5. Assign a grade based on the modified standard and make a note on the report card which standards have been modified. (Guskey & Jung, 2009, p.56)

The Five Step Inclusive Grading Model is very similar to the process of modifying academic standards in developing appropriate IEP goals. For this reason, both general education teachers and education specialists can benefit from the *IEP Goal Based Progress Monitoring Resource* web portal.

**Limitations and Delimitations**

Some natural limitations are inherent in creating a web-based IEP goal resource and in its implementation process. First, the resources, tools, lessons and activities available to the researcher will determine the scope and sequence of the IEP goal resource. Furthermore, research reveals that CBM is the most objective progress monitoring strategy; however, systematic training is needed for full implementation. Additionally, CBM can address many fluency-based goals, but not every IEP goal can be managed through CBM fluency probes. Additional resources and materials will be considered when compiling the *IEP Goal Based Progress Monitoring Resource* for this project. Moreover, the time frame of the present study will greatly impact the level of education specialist involvement and feedback, as the study is conducted over summer break.

Aside from the foregoing natural limitations, there are researcher set delimitations. The study will focus on a single suburban school district in southern California. Research
participants will be anonymously derived from mild-moderate education specialists for grades two through five through an online survey. For the purposes of this study, only California English Language Arts standards and IEP goals will be addressed.

Current outstanding academic literature is reviewed in Chapter Two, including evaluating existing progress monitoring strategies used by education specialists. Chapter Three details the *IEP Goal Based Progress Monitoring Resource* project methodology and is described in detail. Subsequent chapters also address the actual web resource, as it becomes live, as well as perceived usefulness and effectiveness of the *IEP Goal Based Progress Monitoring Resource*, based upon the aforementioned survey of educational specialists.
Chapter Two: Review of Literature

Measuring IEP Goal Progress

As presented in the introduction, progress monitoring systems used by education specialists to determine adequate Individualized Education Plan (IEP) goal mastery generally appear to be inconsistent across school districts, school sites and classroom settings. Although legally mandated, evidence indicates that inadequate compliance with progress monitoring more than any other component of the IEP (Jung & Guskey, 2007). In order for measurements of IEP goal mastery to be accurate, progress-monitoring strategies must be implemented in a data based, objective manner that is consistent among education specialists, at least within a district setting, so as to offer students an accurate and effective instructional experience. Without a consistent progress monitoring system in place, research states that many educators rely on teacher-made assessments to gauge goal mastery. Fuchs, Deno and Martin (1984) found that, “special educators appear to prefer unsystematic observation to objective measurement to assess student progress…(this) often leads to spuriously optimistic judgments of achievement, which indicates clinicians are prone to experience great confidence in highly fallible, typically self-confirming judgments” (p. 450). This subjective system leads to inaccurate communication of student abilities as well as areas of deficit to other educators, parents and the students themselves.

The overarching research question guiding this literature review is, “What existing progress monitoring and data-collection strategies are educational specialists using for objective IEP goal mastery evaluation and reporting?” Based on the data compiled, a second question emerges: “Can consistent, objective and transferrable resources be utilized to better facilitate measurement processes, communication and instructional delivery?” To answer this question,
this review of current literature discusses the challenges of evaluating, grading and reporting IEP goal progress for students with special needs. The chapter continues by summarizing existing progress monitoring and data collection strategies used to measure IEP goal mastery. The most frequently used objective data collection and progress-monitoring system found in the research is Curriculum Based Measurement (CBM), as described in Chapter One of this study. A large portion of this literature review discusses the multiple studies conducted evaluating the efficiency, validity and reliability of objective CBM data-collection methods and how they apply to special education and school wide accountability. The findings of these studies are synthesized in order to identify a gap in the existing research. The chapter concludes with a rationale for the proposed research project, derived from the needs identified within areas of further research.

**Progress Monitoring, Grading & Reporting Challenges for Students with Special Needs**

Although challenges with reporting progress for students with special needs have been discussed in research dating back to the 1980’s (Fuchs, Deno & Mirkin, 1984), the topic continues to be prevalent today. Twenty five years later, researchers Guskey and Jung (2009) are still reflecting similar sentiments; that many teachers create informal grading systems for students with special needs, and these grades and scores do little to reflect a student’s actual academic achievement. They reiterate the struggle educators face to assign “fair, accurate and meaningful grades to students with disabilities” (Guskey & Jung, 2009, p. 53). They further question the inherent conundrum educators face assigning grades to students with special needs: grade students on achievement and mastery of standards, or on effort and progress made towards the standards?
Two different research studies identified this challenge and evaluated the effects of frequent and consistent progress monitoring. Fuchs, Deno and Mirkin (1984) implemented a data-based program modification (DBPM) tool and Kim, Deno & Marston (1993) implemented curriculum-based measurement (CBM) monitoring tool in their respective studies. Both instructional tools are designed to assist educators in formulating instructional decisions as well as provide feedback to monitor progress. Using data to drive educational decisions is a significant relationship between IEP goal evaluation and communicating progress (Kim, Deno & Marston, 1993). Kim, et al (1993) acknowledged the necessary correlation between frequent assessment and implementation of modified instruction. They found that established progress monitoring strategies, which are referred to as “data utilization strategies,” provided teachers with “decision rules that determine how student progress data are to be related to instructional programs” (Kim, Deno & Marston, 1993, p. 160). Furthermore, Kim, Deno & Marston described data utilization strategies in relation to IEP goal progress monitoring:

Data utilization strategies are thought to be necessary for helping teachers evaluate and modify their instruction systematically. Although teachers may collect student performance data...they frequently fail to employ those data meaningfully to develop students’ educational programs. In the goal-oriented approach, decisions about instructional changes are based upon the relation between current progress, and the progress required to make the annual IEP goal (1993, p. 160).

As a result of consistent, systematic progress monitoring, students are able to reiterate and comprehend their goals as well as estimate whether they would meet their goals based on graphed data (Fuchs, Deno & Mirkin, 1984). Although the research is a decade apart, both studies analyze the effects progress-monitoring strategies have on student achievement, instructional outcomes and communication of goal expectations and progress.

The Fuchs, et al. and Kim, et al. studies both offer objective strategies to use in order to monitor progress towards long-term reading goals. First, the correlational study, conducted by
Fuchs et al. in 1984, evaluated the relationship between systematic, structured, objective progress monitoring strategies as compared to an unsystematic, subjective, observational progress monitoring strategy to reach IEP goal mastery. Identifying the educational outcomes from different forms of progress monitoring is essential because legal requirements mandate IEPs must enable a child to “achieve passing marks and advance from grade to grade (because) a failing grade for a student receiving special education services is considered an indication that appropriate educational services were not provided” (Guskey & Jung, 2009, p. 54).

The Fuchs, et al. research study consisted of thirty-nine special educators in a New York City public school system who volunteered to participate in an 18-week implementation study to monitor reading growth. The educators were randomly divided into two groups: experimental and contrast. Each special educator worked closely with three or four students as part of this study. The experimental group consisted of three male teachers and fifteen female with an average of 3.79 years experience teaching special education. The contrast group consisted of two male teachers and nineteen female teachers with an average of 3.59 years experience in special education. Students in both groups qualified for special education services under the conditions: emotionally disturbed, brain-injured and learning handicapped.

The purpose of this study was to identify the effects of frequent, objective testing and continuous evaluation versus teacher-made, nonsystematic progress monitoring. All students were administered baseline reading assessments: Passage Reading Test, Stanford Diagnostic Reading Test and Structure of Instruction Rating Scale. The experimental group utilized data-based program modification, DBPM, (a repeated, systematic assessment system) to measure long-range goal behavior in a highly structured system. The contrast group set IEP goals and monitored progress at their own discretion, relying on teacher-made assessments, observations
and workbook exercises as measurement instruments. At the end of the 18 week implementation, students were re-administered the reading assessments.

Findings from this post assessment show that, “children whose teachers employed the ongoing measurement and evaluation system, DBPM, achieved better results than students whose teachers used conventional monitoring methods” (Fuchs, Deno & Mirkin, 1984, p. 456). Experimental and contrast teachers were also surveyed to identify their responses to student progress. Experimental DBPM teachers had “more realistic” judgment of student growth and ability levels, whereas contrast teachers were more uncertain and overly optimistic in their judgments. Guskey and Jung (2009) echo this finding, “(a great deal) of teachers vary the criteria they employ from student to student, taking into account individual circumstances…although teachers do this in an effort to be fair, the result is a hodgepodge grade that is difficult for parents or students to interpret” (p. 56). As a result of differences in student achievement, observed between the experimental and contrast groups, Fuchs, Deno and Mirkin conclude that the DBPM process is an objective and systematic system for analyzing progress on IEP goals.

The second study, by researchers Kim, Deno & Marston (1993), identified variables in approaches teachers use to monitor progress and the effect they have on instruction and student achievement. Some of these variables are at the educators’ discretion (quality of instruction), while some are unalterable (gender, aptitude, grade level). The researchers’ main purpose in this study was to examine the overall influence of different variables on student achievement. However, the variable of importance in terms of this literature review is the role feedback from progress monitoring strategies plays on instruction and student achievement (Kim, Deno & Marston, 1993).
As part of this study 343 students with learning disabilities (functioning at least two grade levels below their age placement) across grade levels one through six at thirty-five different elementary schools participated. The students’ progress on reading fluency was monitored using frequent Curriculum-Based Measurement (CBM) probes. Since structured systematic measurement increases pedagogy, educational decisions are guided by the data derived from the probes (Fuchs, Deno & Mirkin, 1984; Kim, Deno & Marston, 1993). Findings from this study reveal a positive increase in teacher behavior with progress monitoring due to instructional changes derived from CBM data. The researchers reach the conclusion that, “reviewing student progress data in this way (with CBM) may contribute to an increase in teacher attention to the data and result in more instructional interventions” (Kim, Deno & Marston, 1993, p. 171). Although many factors are out of the education specialists’ control, educators are able to adapt their progress monitoring methods to contend with the challenge of reporting IEP goal mastery for students with special needs.

**Curriculum Based Measurement and Student Achievement**

Curriculum Based Measurement has been implemented as a data-based decision making strategy for over thirty years. A detailed overview of Curriculum Based Measurement (CBM) was provided in Chapter One. Numerous studies have been conducted to analyze the effectiveness of CBM on student achievement in a variety of student populations. Each of the studies reviewed in this section give a background overview of the widespread uses of CBM as a progress-monitoring tool, not only for education specialists, but also as part of a school-wide Response to Intervention (RTI) model as well as a means to gauge Adequate Yearly Progress (AYP).
The following four studies focus on the use of CBM reading fluency probes to determine the validity and reliability of this monitoring strategy in relation to multiple sub-groups within a school population. In order for a particular school to meet adequate yearly progress (AYP) each academic year, all subgroups must achieve growth. These subgroups include students with special needs, English language learners, students from a low socio-economic status, and others.

The Christ, Silberglitt, Yeo and Cormier (2010) study focused on the use of CBM to monitor oral reading fluency rates between general and special education students. In 2011, Yeo, Fearrington and Christ conducted a study investigating potential bias based on gender, income and special education status with CBM reading fluency assessments. Baker and Good (1995) sought to validate the use of CBM with bilingual English Language Learner population. Muyskens, Betts, Lau and Marston (2009) also explored the validity of CBM assessments to measure English Language Learners reading fluency, on a larger scale.

Curriculum Based Measurement, at the school wide level, is administered three times throughout the year (fall, winter, spring). Original CBM-Reading (CBM-R) research suggests that all student growth on reading fluency probes have a linear slope. However, Christ, Silberglitt, Yeo and Cormier (2010) suggest that annual growth on CBM reading fluency carries with it seasonal effect for students in the general education population. This means that their fluency progress is at an increased slope/rate during the fall season compared to other seasons throughout the year. The study also found a higher rate of improvement, or a steeper slope, for students in the general education setting than those with special needs. However, data for students in special education showed that the seasonal effect was not as prominent, signifying that their rate of improvement was more linear and consistent throughout the school year.
To further support the idea that CBM can be used to make essential educational and instructional decisions for students with special needs, Yeo, Fearrington & Christ (2011) state that CBM is used as a universal screening tool to determine which students need interventions within a Response to Intervention (RTI) model. In more intensive intervention settings, CBM probes should be administered more frequently than in the general education setting; however, for true progress to be made among these populations, monitoring probes should be on-going (Fuchs, Fuchs & Hamlett, 1990). CBM is also used to make special education eligibility decisions, including the diagnosis of a specific learning disability (Yeo et al., 2011). With frequent probes, education specialists can readily determine an adequate slope/rate of improvement in order to write attainable reading fluency goals for students with IEPs.

Due to the important role CBM probes play in educational decisions, Yeo et al., (2011) aim to identify potential slope bias in reading fluency CBM probes depending upon demographic characteristics such as “gender, ethnicity, socio-economic status and special education status” (p. 120). The participants in this study ranged from grades three through eight across two elementary schools and three middle schools, all within a rural southeastern school district in the United States. The sample included 850 females and 880 males from both general education and special education populations, with 94.5% Caucasian ethnic predominance. Students participating in the study were assessed over time with CBM-Reading fluency probes and Maze probes. In contrast to the previously mentioned study, Yeo et al. (2011) found that CBM-R (Fluency) slopes for students receiving special education services were similar to students in general education. This finding contradicts the previous study, which shows a steeper improvement slope with general education students (Christ et al., 2010). Although this statistic held true in all the tested grade levels, except grade 3, the researchers noted they did not
gather specific information on the severity of disabilities for students participating. The severity of the disability can have a drastic impact on the slope of progress, which may be a significant cause for the discrepancy between the two studies.

The use of CBM to monitor progress in English Language Learners is also an important area of research to cover because “proper assessment of English learners is essential for progress monitoring, predicting achievement, determining language proficiency and identifying students with special disabilities” (Sandberg & Reschley, 2011, p. 144). This is especially relevant since so many English Language Learners are erroneously referred for special education eligibility evaluations. However, Sandberg & Reschley (2011) note that a Specific Learning Disability (SLD) cannot be based on cultural factors, limited English proficiency or gaps in schooling, even though English Language Learners and students with SLD present similar difficulties with language acquisition. This sub group is particularly relevant to this study, because many of students in the district where the web resource was implemented are English Language Learners, as well as students with special needs.

Sandberg & Reschley (2011) recommend Curriculum Based Measurement as a better alternative to Standardized Testing to monitor reading progress of English Language Learners. Their conclusions were based on the Baker & Good (1995) study, which investigated the use of Curriculum Based Measurement to assess progress of bilingual students on English reading fluency. The purpose of this study was to determine the reliability and validity of using CBM probes with English Language Learners. It is important to consider potential bias with standardized tests of English Language learners, because they “may not have been included in the test developer’s norms, which results in inaccurate interpretation of English Learner’s scores” (Sandberg & Reschly, 2011, 146). The participants in this study consisted of 50
bilingual Hispanic students and 26 English only second grade students from a rural district in Washington State. Before beginning the study, all bilingual students were assessed in both English and Spanish versions of the Language Assessment Scales. Their proficiencies ranged from dual-bilinguals, those with strong proficiency in both, to pseudolinguals, those with minimal proficiency in both. Over a 10-week span, the students were administered CBM-R (reading fluency) probes biweekly.

As a result of the study, data indicated CBM reading fluency probes administered in English were reliable and valid for bilingual studies as well as English-only students. Data also suggested reliability for screening decisions as well as educational decisions due to a reliability indicator of .99 (Baker & Good, 1995). Baker & Good go on to state that the data supports not only a conclusion that CBM reading fluency probes administered in English are reliable means for measuring bilingual students’ reading proficiency, but also the additional conclusion that the process is valid. They conclude, “CBM English reading is strongly related to other measures of reading proficiency…and may be related to reading proficiency and oral language proficiency in the same way for bilingual students as for English-Only students” (Baker & Good, 1995, p. 575).

A second study focusing on the use of CBM-R assessments for English Language Learners expands the study population to include not only Hispanic speaking students, but also those whose native languages were Hmong and Somali as well. Furthermore, Muyskens, Betts, Lau & Marston (2009) assessed the predictive validity of CBM in a large urban school district, in contrast to the Baker & Good (1995) study conducted in a small, rural town.

The purpose of the Muyskens et al. (2009) study was to identify any correlation among performance on CBM Reading fluency assessments and achievement on state accountability
tests. The population of participants in this study consisted of 1,529 fifth grade English language learner students whose native languages were Spanish, Hmong and Somali. The sample consisted of 52% male students and 48% female students with 95% eligible for free or reduced lunch.

Students were administered CBM Reading fluency probes in September, and took the state accountability assessment (MCA) in April. Based on results from the CBM-R fluency assessment in the fall, administrators made predictions about how they thought students would perform on the assessment in the spring. Using regression analysis, data indicated, “the fall CBM measure appears to be a significant predictor of MCA reading score in the spring of the year...and three out of four ELL students can be correctly classified on later proficiency status based on their CBM scores from the beginning of the year” (Muyskens, et al., 2009, pp. 16-17). The data from this study is relevant to educators and administrators at this researcher’s school district due to the large population of English Language Learners and the increasing pressure for this population to meet adequate yearly progress. Muyskens, et al. (2009) determined CBM as a valid tool for screening and monitoring reading progress with English Language Learners, in particular when special education eligibility is in dispute. More specifically, “CBM with ELL students can provide a practical framework for the implementation of a RTI (Response to Intervention) type approach to intervention and decision making” (Muyskens, et al., 2009, p. 19).

Curriculum Based Measurement and IEP Goal Progress

Curriculum Based Measurement, when used frequently and consistently, is a tool for goal setting and evaluation (Jenkins & Terjeson, 2011). Education specialists can use CBM to monitor progress and meet legal requirements for individualized education plans. Without a
data-based progress monitoring system and routine, IEP goal mastery evaluation is an area of concern due to the inconsistency between objectives, instruction and assessment data (Codding, Skowron, & Pace, 2005). Many researchers recommend that education specialists utilize CBM data to set and measure long-term IEP goals because the process is individualized, ongoing and informative for adaptations to instruction (Fuchs, Fuchs & Hamlett, 1990; Codding, Skowron & Pace, 2005).

Fuchs & Fuchs (2004) provide a model of how CBM can assist special educators in writing and monitoring IEP goals by giving a baseline CBM fluency probe. The baseline is the student’s current performance level, and the student’s year-end goal is established by reference to CBM benchmarks. Once these scores are charted, a line is drawn predicting the intended slope, or rate of progress a student needs to make, with frequent confirming measurements in order to meet his or her goal. Based on weekly or biweekly measurements, the education specialist can determine if instructional procedures need to modification or adaptation in order to assist the student in meeting the year-end benchmark.

In the following studies, researchers selected groups of students receiving special education services for mild to moderate disabilities. Jenkins and Terjeson (2011) focused on determining the kind of impact that ambitious goals, frequent monitoring and slope progress have on individualized data-based instructional changes. Stecker and Fuchs (2000) conducted a study relating overall student achievement in mathematics to individualized progress-monitoring data through CBM.

Jenkins and Terjeson (2011) selected key aspects in the CBM progress monitoring and data evaluation system and evaluated the role they play on awareness of “instructional change prompts.” Instructional change prompts are consecutive median scores below the goal line. For
example, if a student is monitored with CBM passages every two weeks, three scores below the intended goal line, or slope, would prompt an instructional change because he or she is not making adequate progress towards the intended goal. The 2011 research study aimed to determine the role goal ambitiousness played in mastery evaluation. Jenkins and Terjeson found that, “as goal ambitiousness increases, so does the number of students whose growth will be considered inadequate and consequently the number of instructional change prompts generated” (2011, p. 29).

In order to test this theory, thirty-one special education students (18 males, 13 females) from grades two through six participated in the study (2 second grade, 15 third grade, 3 fourth grade, 10 fifth grade, 1 sixth grade). Before the CBM intervention, the sample population was administered a baseline assessment. Results of the baseline oral reading assessment showed 27 of 31 students fell into the “at risk” category for their grade level, and four were at “some risk” (Jenkins & Terjeson, 2011). Every two weeks over an eight-week period, the participants were administered thirteen randomly selected passages from a grade level DIBELS (Dynamic Indicators of Basic Early Literacy Skills) passages.

With each monitoring trial, the words read correctly (WRC) were recorded and graphs for each student were generated for three different time frames: two, four and eight weeks, and for three different WRC increase goals: 0.5, 1.0 and 1.5 increase weekly gains. The nine graphs were overlaid to determine “decision rules for instructional change.” The researchers found that the optimal timing for instructional changes depends on the frequency of measurement. For example, if a student was measured every two weeks, optimal results were obtained by beginning instructional change after three consecutive scores below the goal line; if a student was measured every four weeks, optimal results were obtained by beginning change after two
consecutive scores below the goal line; and if a student was tested every eight weeks, optimal
results were obtained by beginning change after one score below the goal line (Jenkins &
Terjeson, 2011, p. 30). As a result, they concluded, that more ambitious goals, with less
frequent monitoring generate more instructional change prompts. The researchers stated:

More ambitious goals result in more students performing below their teachers’
aspirations, and more prompts to change instruction (are generated)...Setting
more ambitious goals may serve to prod teachers to revise instruction more
often; conversely, setting less ambitious goals may seduce teachers to settle for
weak growth (Jenkins & Terjerson, 2011, p. 33).

Displaying data generated from CBM trials visually communicates expected and actual
student growth between teachers, administrators and families. Teachers who use CBM to write
long-term IEP goals have a validated standard measure to determine mastery of current reading
fluency goals, as well as proposed goals (Mattatall, 2011). Furthermore, teachers trained in
using CBM data to write IEP goals learn how to use assessment information to identify a
student’s level of instruction, frustration and mastery, determine and record current performance
levels, and create annual goals with attainable benchmarks dependent on an expected slope of
progress (Codding, Skowron & Pace, 2005). The data gathered through these research studies
can assist education specialists in writing effective IEP goals because the data gathered is
“technically adequate,” (valid and reliable) “empirically established” (standardized benchmarks)
and can easily be translated into year-end targets or annual goals (Mattatall, 2011, p. 64).

Much of the literature reviewed in this chapter reflects reading fluency progress
monitoring; however, studies have been conducted evaluating the use of CBM with
mathematics achievement, as well. In 2000, Stecker and Fuchs conducted a study examining the
value attained by designing individualized programs based upon individual progress monitoring
data. In this study, 22 special education teachers monitored mathematics progress of 42 students with mild-moderate disabilities over a 20-week period.

The 42 students with special needs, ranging from grades 2-8, were all administered CBM mathematics trials. However, the 42 students were split into two groups: CBM target students whose instructional adjustments were directly based on their CBM data, and partner students whose instructional adjustments were based on the CBM data of a peer. Students were administered a baseline assessment, Mathematics Operations Test-Revised, and pairs of students (one target, one partner) were matched based on proficiency levels. Over the 20-week period, instructional changes were made to each pair of students depending upon the target student’s CBM progress slope. At the close of the study, all students were reassessed using the Mathematics Operations Test-Revised to collect posttest data. The researchers analyzed data to determine whether target students or partner students had greater levels of achievement (Jenkins & Terjeson, 2000).

Overall, findings of the study indicate that greater achievement and performance levels were found in the target students than in the partner students. Both students received the same instruction, however, the instructional decisions and changes were determined on the target student’s CBM slope. As a result, the target students “gained significantly more progress on the mathematics operations achievement test than did their counterparts that had received the same instructional programs throughout the study” (Jenkins & Terjeson, 2000, p. 131). The findings of this study further support the value of employing a systematic approach to monitoring goal progress and adjusting instruction to helping students make progress on annual goals (Mattatall, 2011).
Curriculum Based Measurement and School-Wide Accountability

As mentioned in the introduction, numerous school districts across the country are utilizing Curriculum Based Measurement as a means of compliance with No Child Left Behind (NCLB). In 2010, Lembke, Garman, Deno & Stecker describe how one elementary school in the Midwest implemented a Response to Intervention (RTI) program with frequent curriculum based measurement fluency probes in order to monitor instructional interventions over a three year period. As a result of tri-annual CBM-Reading fluency probes, students were placed in one of the three tiers for core (Tier 1), strategic (Tier II) or intensive (Tier III) intervention instruction. Student progress throughout the year on the CBM probes determined the number of minutes of intervention services the children received. Lembke, et al., noted a change in the percentage of students who require strategic and intensive intervention (Tiers II and III) as a result of instructional decisions based on CBM monitoring data. In the particular elementary school subject to the study, “the percentage of students at Tier I has increased from 30% to 44%, Tier II has remained the same at 26%, but Tier III has decreased from 44% to 30%” (Lembke, et al., 2011, 369). Furthermore, the researchers found that using CBM passages for screening correlated to student achievement on district wide reading assessments.

In addition to determining RTI tiers, CBM benchmarks have been used to predict adequate yearly progress (AYP) or the rate of growth each school site is expected to make towards meeting the proficiency improvement rates as mandated by No Child Left Behind legislation. Fuchs & Fuchs (2004) recommended a four tiered monitoring approach to analyze whether students are meeting these benchmarks: Level 1: Beginning – End of School Year, Level II: Within the Year (School Wide), Level III: Within The Year (Teacher), Level IV: Within the Year (Student). Fuchs & Fuchs also developed appropriate benchmarks for students
in grades kindergarten through sixth, beginning with letter-sound fluency, to word identification, passage reading fluency and maze/close passage completion.

The stated tiers and benchmarks were implemented over five academic school years, 2004-2008. Fuchs & Fuchs (2004) began by determining the number of students already meeting proficiency status and subtracting that number from the total student body. This number quantified the students who need to make progress towards proficiency in order to meet AYP. In their single school example, the student body was 498 students, with 257 who initially met proficiency. This left 241 students in a progress discrepancy gap. Starting in 2004, the school district was provided the guideline of 10 years to move all students toward proficiency by the NCLB mandated 2013-2014 school year. 241 students divided by 10 years equaled a necessary annual growth of 24 students gaining proficiency in order to meet the AYP requirements. CBM benchmark fluency probes were implemented throughout the school year in all grades, kindergarten through sixth grade. As a result of the frequent CBM progress monitoring, researchers graphed the number of students meeting their CBM benchmarks in all four tiers. By frequently monitoring progress, educators were able to manipulate students in flexible tiered groupings based on CBM data. The continuous monitoring prompted instructional changes. The graphed results showed an overall growth in AYP for four of the five school years as a result of frequent progress monitoring guiding instructional decisions.

IEP Goal Based Progress Monitoring Web Resource

As a result of reviewing literature, Curriculum Based Measurement is an existing progress monitoring strategy education specialists use to objectively gather data for IEP goal mastery. Training educators and administrators in CBM strategies would assist schools with monitoring response to intervention, progress towards meeting annual yearly progress, as well
IEP GOAL BASED PROGRESS MONITORING WEB RESOURCE

as assist special educators monitoring IEP goal mastery. However, CBM methods are not widespread in the researcher’s school district.

At a time when IEP goal banks are available electronically, it seems reasonable to anticipate the development of a secondary electronic resource to assist education specialists with using common resources to monitor progress on similar goals. The availability of a district wide web resource with CBM fluency passages and mathematical operation assessments that is adopted, then mandated for baseline and progress monitoring of all students with IEPs, may make for more consistent communication of goal progress. However, although CBM is effective for monitoring progress for some goals, not all proposed IEP goals can be monitored in this fashion, which is where the sharing of resources across a school district will assist education specialists with monitoring IEP goals in a consistent method.

The purpose of the researcher’s project was to create a web resource designed to help education specialists objectively measure and communicate IEP goal progress. The resulting website was aligned specifically to California state standards already available in an electronic IEP goal bank. The project focused explicitly on reading decoding, fluency, vocabulary and reading comprehension standards based IEP goals. For each language arts standard for grades two through five, communal, progress monitoring resources or activities were made available. For some standards and goals, fluency procedures were sufficient, but for goals more specific to comprehension skills, resources were created or derived from existing materials. Each California standard required materials accessible for a variety of reading levels and ability levels so the educator can individualize the monitoring materials for each student.

A pilot version of the web resource was introduced to a population of education specialists in a suburban, Southern California school district with a high population of English
Language Learning students with special needs. A survey was used to evaluate the overall opinion, usefulness and effectiveness of the pilot web-based resource. The following research questions were answered: (1) Is this web-based IEP goal monitoring resource a useful tool for consistent evaluation? And (2) Will this web-resource improve communication of IEP goal progress among teachers, administrators, students and families?
Chapter Three: Methodology

The purpose of the research project was to develop an Individualized Education Plan (IEP) goal based web resource to improve consistent progress monitoring and communication of IEP goal mastery. Research suggests, when not provided with a progress monitoring method, many education specialists rely on subjective, teacher-made assessments to evaluate IEP goal mastery. This inconsistent practice leads to inconsistent communication of students’ abilities. Subjective, inconsistent monitoring can result in non-compliance with annual goal evaluation.

A progress monitoring method, widely used among educators, is Curriculum Based Measurement (CBM). CBM utilizes one-minute fluency probes given to identify students’ baseline performance levels and to determine an expected slope of growth towards an annual goal. Depending on the intervention needs of the student, CBM probes are given at specific increments over time, more frequently for students with special needs, less frequently for the general education population. Growth rates are observed and tracked to determine whether students are progressing at a rate to enable them to meet their annual goal. CBM fluency probes are data driven and help educators make instructional decisions affecting students on an individual basis.

Since the mid 1980s, education specialists have used CBM for setting and monitoring IEP goal progress. Curriculum Based Measurement fluency probes are an example of consistent progress monitoring procedures. However, not every district has trained its staff in CBM data collection and analysis. Until an entire staff can be trained in the CBM procedures, an alternative method for frequent, objective and consistent IEP goal monitoring among education specialists needs to be developed. For this reason, an IEP Goal Based Progress Monitoring Resource was created to provide education specialists with materials and resources to frequently
monitor IEP goal progress in an effort to stay compliant with legally mandated IEP goal evaluation requirements. The *IEP Goal Based Progress Monitoring Resource* was developed to determine whether implementation of a resource sharing website, based on standards based IEP goals, would improve communication and goal evaluation between educators, families and students.

This chapter was designed to fully describe the *IEP Goal Based Progress Monitoring Resource* project design, target population and setting in which the project is intended to be used. Furthermore the Chapter discusses the instruments, tools and procedures designed to implement the project. Finally, the Chapter outlines the process used for by the researcher to evaluate the *IEP Goal Based Progress Monitoring* website.

**IEP Goal Based Progress Monitoring Web Resource Design**

The *IEP Goal Based Progress Monitoring Resource* was created as a resource-sharing website to be used by special educators to evaluate student progress towards meeting annual IEP goals. The website consists of standards based Individualized Education Plan goals derived from an existing IEP goal bank developed by a special education consortium in Southern California. This specific goal bank is accessible to education specialists employed by districts incorporated within the consortium. The IEP goals selected for the web resource focused on English Language Arts standards. Even more specifically, the goals were scaffolded for students performing academically from the second to fifth grade level.

Each grade level, two through five, was allocated a page on the resource website. The materials created were aligned to California State Standards for English Language Arts. The resources were designed to measure progress on specific standards based goals for (1) Word Analysis, Fluency and Decoding, (2) Vocabulary Development and (3) Reading Comprehension
and Analysis of Text. The Word Analysis, Fluency and Decoding subsection consisted of sight words, nonsense words and complex word family lists in both student and teacher versions. Also, reading fluency procedures and graphing materials were developed for use with appropriate level texts. The Vocabulary Development subsection focused on synonyms, antonyms, homographs, homophones and word meanings. Within each vocabulary focus, leveled activities were created for use with students performing at different academic levels. For example, a student in fifth grade may be decoding and comprehending text at the second grade level. For this student, fifth grade level activities are challenging and may not give an accurate reflection on the student’s abilities. The leveled vocabulary word lists were of particular interest to the researcher since there had been no formally adopted set word lists for education specialists to use to monitor vocabulary goal progress in the researcher’s school district. The third subsection, Reading Comprehension and Analysis of Text, consisted of graphic organizers for use with appropriate level texts.

Along with materials aligned to the California standard for each grade level English Language Arts competency, the web site provides references to additional resources and supplemental curriculum. The additional resources included such items as student and teacher versions of all sight word lists from first through fifth grade. The range of sight word lists was essential since students with learning disabilities in one grade level are likely performing academically at another. Furthermore, the Additional Resources page refers to fluency passages, both within the district-adopted curriculum, as well as in supplemental curriculum available at additional cost. The final subsection consisted of intensive intervention programs, successfully implemented by districts across the country, designed for students reading below grade level.
Intended Audience and Setting

The *IEP Goal Based Progress Monitoring Resource* was intended as a tool for education specialists to help them increase consistency in IEP goal progress monitoring materials and procedures, as well as in communication regarding students’ mastery of annual goals. During the course of study, the web resource benefited education specialists working with students with mild/moderate disabilities who had academic goals for English Language Arts between grades two through five. The website was designed for elementary education specialists as well as special educators at the middle and/or high school level who had students on their caseloads with second through fifth grade reading goals.

The goal of the *IEP Goal Based Progress Monitoring Resource* was to allow education specialists using this site to add further resources onto the website in the areas of writing, mathematics, social skills, behavior, etc… The ultimate goal of the researcher is to develop the website so that eventually, all California standards based goals, Kindergarten through twelfth grade, will be represented allowing every special educator within the district or consortium to use a consistent procedure to evaluate goal progress.

In order to make sure the *IEP Goal Based Progress Monitoring Resource* met the needs of education specialists and their students, eight education specialists within the same consortium completed a survey designed to provide constructive feedback. All the education specialists who participated taught elementary students with mild/moderate disabilities within the resource specialist or special day class programs. As a limitation set by the researcher, survey participants consisted of a convenience sampling. Twenty-two elementary mild/moderate education specialists were invited to participate via email to an online survey.
through Survey Monkey. However, since the project was completed over summer hiatus, only 8 out of 22 educators participated.

Those who participated taught within a single Southern California suburban school district. The school district had both Title 1 Program Improvement schools, as well as schools that met Adequate Yearly Progress. Enrollment consisted of over 50% Hispanic/Latino, with a particularly high concentration at some elementary sites. For example, one elementary school in the district where survey participants taught had 90% Hispanic/Latino and 4.9% White enrollment, with 95% of the student population socioeconomically disadvantaged, 80% English Language Learners and 12% of students had disabilities (“M” Elementary School Accountability Report Card). However, another school, within the same school district where survey participants taught had only 23% Hispanic/Latino and 58% white enrollment, with 19% socioeconomically disadvantaged, with 11% English Language Learners, and 12% of students had disabilities (“L” Elementary School Accountability Report Card). The difference in population was noted because the IEP Web Based Resource had to meet the needs of education specialists who worked in settings with a variety of challenges.

**Instruments Overview**

A variety of instruments were used to guide development of the *IEP Goal Based Progress Monitoring Resource*. First of all, California state standards based IEP goals accessed through an existing public goal bank created the foundation for the website. Since the standards based goals outlined instruction for education specialists, they were the basis for all materials created and compiled for the web resource.

To be compliant, each California standards based goal needs to be periodically evaluated throughout the academic year to monitor student progress toward annual IEP goals. Keeping
this need in mind, the researcher developed progress monitoring instruments aligned with the California standards based goals including word lists, worksheets and graphic organizers, designed for repeated implementation.

**Word Analysis, Fluency and Decoding: Instruments and Procedures**

One Word Analysis, Fluency and Decoding California standard focuses on reading high frequency sight words. In order to develop both student and teacher versions of the sight word tool, the researcher had to obtain appropriate grade level sight word lists. The words used to measure sight word reading proficiency were derived from Edward B. Fry’s and Jacqueline E. Kress’s *The Reading Teacher’s Book of Lists*. The words, referred to as “Fry’s Instant Words” are categorized into groups of 100 words per each grade level, beginning at first grade (1-100), through tenth grade, (901-1000). According to Fry and Kress (2006) the words are ranked in order of frequency in common language use. To monitor progress of sight word reading proficiency, the researcher utilized Fry’s Instant Words to create a series of student friendly lists and teacher progress monitoring checklists, by grade level, intended to be used quarterly throughout the school year.

Each word list, whether created to assess high frequency sight words, nonsense words or words from complex word families, consisted of both a student friendly version as well as a teacher monitoring version. The student version consisted of 25 word sets, two sets per page, in size 26 font. The teacher version contained the same words, in increments of 25, to match the student list. In addition, the teacher version had additional columns to track proficiency quarterly throughout the school year.

Reading fluency was a California standards based goal common across grade levels two through five. Since students’ reading fluency levels varied depending on their decoding ability,
specific reading passages were not provided. Instead a procedure for teachers to use in monitoring reading fluency, as well as form reading fluency graphs were created for common use among all educators, independent of grade level. The Reading Fluency Procedure provided for education specialists to utilize when monitoring reading fluency consisted of a one-minute “cold read” where students read the appropriate level text without any pre-reading. The procedure indicates students or teachers chart the score of correct words per minute on a fluency bar graph in blue. Then students are recommended to participate in uncharted re-readings. After adequate practice with accuracy, pacing and expression, the reading fluency procedure calls for students to re-read the text for a one-minute “hot read”. Their score of correct words per minute is charted on the fluency bar graph in red. Students, parents and educators can visually identify growth patterns for students with this procedure.

**Vocabulary Development: Instruments and Procedures**

To evaluate mastery of vocabulary development for synonyms, antonyms, homographs, homophones and word meanings, student worksheets were created with two levels of words. The vocabulary words were ascertained through an award winning online spelling and vocabulary website, *Vocabulary Spelling City*, aligned to the Common Core State Standards. The materials provided in the *IEP Goal Based Progress Monitoring Resource* consisted of leveled words. Level A words consisted of common vocabulary for Kindergarten through second grade; Level B words were from a third grade through fifth grade level. The materials and activities developed addressed each specific California State Standard as listed in the IEP goal bank. These activities included, matching synonyms and antonym word pairs, identifying meanings of unknown vocabulary words, as well as distinguishing the intended definition of a multiple meaning word. The vocabulary activities were for specific grade levels were essential
because without having a common word list, it was challenging for education specialists to accurately track goal mastery and communicate student’s vocabulary proficiency.

**Reading Comprehension and Analysis of Text: Instruments and Procedures**

Reading passages for comprehension were not developed as part of the project, due to the abundance of texts available through existing curriculum adopted by the district in which the study was conducted. However, instruments in the form of graphic organizers were created to assist teachers to evaluate reading comprehension skills and strategies as outlined in the California grade level standards-based IEP goals. The graphic organizers were developed by adapting and modifying the general education district adopted curriculum into a simplified version. The organizers were designed to apply to students in a variety of grade levels with varying and reading comprehension proficiency abilities.

**Survey Instrument**

The final instrument used was the survey tool designed to evaluate the overall effectiveness and usefulness of the *IEP Goal Based Progress Monitoring Resource* when used by other professionals in the field. Survey questions were designed to establish opinions on how objective and consistent education specialists believed their current IEP goal progress monitoring systems to be. Thereafter, survey participants (teachers) were asked how much time they typically spend preparing their own materials to gauge IEP goal mastery. Once their foundational opinions were expressed, the survey participants were directed to visit the *IEP Goal Based Progress Monitoring Resources* website. After spending time investigating the website, the participants answered additional survey questions regarding the website’s usability. At the end of the study, participating teachers were given the option to provide additional
resources they use to measure and track progress towards annual goals, as well as constructive feedback in order to improve the website and increase teacher commitment to its use.

The data derived from the survey consisted of both quantitative Likert scales and qualitative open-ended questions to identify and discover common themes and patterns in participant responses. Feedback, suggestions and critiques solicited through the survey process prompted the researcher to make responsive changes to the overall layout and content of the online web resource.

**Step-by-Step Procedures**

In the process of creating and implementing the *IEP Goal Based Progress Monitoring Resource* the researcher took specific steps. To begin, applicable literature was reviewed to evaluate what existing progress monitoring strategies exist in current use by education specialists for objective IEP goal progress monitoring. As a result of the research, the need for a consistent progress monitoring resource to assist special educators with annual goal evaluation was identified and the need for a communal resource sharing website was established.

In order to develop the website, first, the researcher had to access all of the Individualized Education Plan standards-based goals from an existing online IEP goal bank. Once the goals were identified, materials were created addressing to each of the IEP goals for English Language Arts grades two through five. As discussed under the heading “Design”, the English Language Arts goals were divided into thee subsections (1) Word Analysis, Fluency and Decoding, (2) Vocabulary Development, and (3) Reading Comprehension and Analysis of Text. The specifics used to develop the materials within each subsection were described in detail above, under the heading “Instruments”. 
After the materials and resources were developed, the website was created. The website entitled, *IEP Goal Based Progress Monitoring Resources*, was organized by grade level, and included with access to both student and teacher versions of progress monitoring tools. The progress monitoring tools were both grade level specific, (i.e. word lists) as well as procedural, (i.e. fluency graphs) used with text targeted at specific appropriate levels.

As soon as the online web resource was established, survey participants taken from the specific sample population listed above, were emailed a link to an anonymous survey via the Survey Monkey website. The survey instrument provided feedback, constructive criticism, as well as insight for additional resources and materials.

Finally, changes were made, based upon the survey participants’ suggestions and concerns. The “Additional Resources” page was expanded to include other resources and materials identified as a result of the survey. The *IEP Goal Based Progress Monitoring Resource* was revised throughout the study, based upon ongoing survey results.

**Evaluation**

In order for the overall success of the project to be evaluated, the researcher reflected upon the feedback and suggestions provided by the survey participants. In an effort to assure the project became an effective IEP goal progress monitoring system, the researcher continued to modify the site until positive feedback established that participating educators were willing to utilize the resource in their classrooms as a means to track goal mastery. The researcher further modified the site until feedback also indicated the site was easy to use in transferring methods across grade levels, reading and ability levels, as well as providing consistency in practices and communication between school sites.
Summary

The *IEP Goal Based Progress Monitoring Resource* has been described in detail from conception through creation, implementation and reflection. The overarching goal of developing a communal, resource sharing website aligned to California standards based IEP goals was to improve consistency in progress evaluation procedures as well as improve communication regarding goal progress between educators and families. Utilizing an existing IEP goal bank to access California English Language Arts standards based goals for grades two through five, enabled the researcher to develop specific materials designed for education specialists to frequently monitor annual goal progress. Resources provided by the website consisted of both student and teacher versions of materials for data collection methods and procedures in Word Analysis, Fluency and Decoding, Vocabulary Development, as well as Reading Comprehension and Analysis of Text.

To determine whether education specialists would make use of *The IEP Goal Based Progress Monitoring Resource* website, mild/moderate education specialists in a Southern California suburban school district were surveyed to obtain anonymous feedback concerning the anticipated need for a communal resource, as well as the likelihood of such resource being utilized.

Chapter Four Preview

The entire *IEP Goal Based Progress Monitoring Resource* is accessible via screen shots reproduced in Chapter Four. Furthermore, each resource available through the website is included, organized by grade level and English Language Arts standard. In addition to setting forth the resources developed in the project in full, an overview of the project including a description of materials and student activities is also included in Chapter Four.
Chapter Four: Project Overview

**IEP Goal Based Progress Monitoring Web Resource**

The *IEP Goal Based Progress Monitoring Resource* was inspired by a need for consistent evaluation and communication of student progress on legally mandated IEP (Individualized Education Plan) goals. Although there are many assessment tools education specialists use to assess students’ present levels in academic achievement, very few measures are specifically aligned to the goals toward which students are working. In the past, a lack of uniformity among the materials education specialists used to monitor goal progress has led to education specialists relying on teacher-made assessments and observations. The lack of consistent procedures fostered the development of subjective and inconsistent means for measuring academic progress.

Creation of a web resource of teacher materials aligned to an existing IEP Goal Bank met the need for communal resources for education specialists to use when monitoring progress towards IEP goals. The project was created with the intention of seeking widespread implementation throughout the school district in which the researcher was employed to enable education specialists to communicate with each other regarding students’ progress on annual IEP goals.

The web resource project focused specifically on English Language Arts standards based goals for grades two through five. The project was organized by grade level resources to monitor standards based goals for: (1) Word Analysis, Fluency and Decoding; (2) Vocabulary Development; and (3) Reading Comprehension and Analysis of text.

Within the Word Analysis, Fluency and Decoding subsection, sight word, nonsense word and complex word family materials for student and teacher materials were generated for
use in quarterly progress monitoring. Sight word lists were compiled from the Fry and Kress 
(2006) Reading Teacher’s Book of Lists. Fry’s sight word lists encompass the 1,000 most 
frequently utilized words. Nonsense word lists were created based on the spelling patterns of 
one-syllable pseudo-words outlined in the Houghton Mifflin Phonics and Decoding Screening. 
The complex word family list was developed utilizing an existing resource, Enchanted 
Learning, which contains a table of common word families. Utilizing the Enchanted Learning 
common word lists, the researcher identified words from the complex word family lists also 
found on third grade spelling tests from the website K12 Reader. The researcher utilized third 
grade spelling lists as a resource because decoding words from Complex Word Families is a 
measurable third grade goal according to the California State Standards.

In addition to the variety of word lists created by the researcher, she also developed one-
minute timed fluency procedures and recording graphs. In addition to a blank bar graph for 
education specialists to use when charting fluency readings, the researcher also created a sample 
color-coded chart to use as an example. The researcher elected to color-code fluency readings 
to enable teachers using them to visualize the progress, or lack of progress, of each student with 
his or her reading fluency.

As part of the Vocabulary Development subsection, vocabulary activities for synonyms, 
antonyms, multiple meaning words and homographs were derived from word lists made 
available by the website, Vocabulary Spelling City. The researcher developed vocabulary 
activities for the IEP Goal Based Progress Monitoring Resource at two levels. Level A 
comprised of vocabulary words common in grades Kindergarten through second, while Level B 
vocabulary words are common in grades three through five.
The project includes worksheet activities designed to correlate specifically to each grade level English Language Arts California state standard. For the synonym and antonym activities, students were directed to match pairs of words. The homograph (words that sound the same, are spelled the same but have different meanings) activity provided students with a multiple meaning word used in a sentence and three potential meanings for the target word. Students were expected to utilize context clues in the sentence to determine the meaning of the target word. The homophones (words that sound alike but are spelled differently with different meanings) worksheet presented students with sentences omitting each target word. Then students were asked to select the appropriate word for each sentence. In order to ascertain whether students are able to identify meanings of unknown words, the researcher designed a worksheet with unknown target words and possible meanings for each word. In order to identify the meaning of the target word, students had to employ context clues in the sentence. The final worksheet activity assessed a student’s ability to utilize a dictionary entry to identify which meaning of a homograph was used in a sentence, and then create his or her own sentence utilizing the same meaning of the target word.

In addition to worksheet activities, word lists were provided to assist education specialists in creating their own materials for extended practice. The word lists were essential components of the web resource because, to date, there were no standardized word lists adopted by the school district in which the researcher worked for education specialists to rely on when measuring annual goal progress.

The third subsection for Language Arts standards based IEP goal progress monitoring was Reading Comprehension and Analysis of Text. This section included grade level graphic organizers, created specifically to document student progress on each comprehension skill or
strategy identified in the IEP goals. The researcher employed frequently used graphic
organizers, such as a Venn Diagram to measure compare and contrast standards. The researcher
also employed flow charts to assess sequences of events and cause and effect relationships.
When addressing standards without universally used graphic organizers, the researcher
attempted to create easy to use worksheet activities that corresponded directly to California
State Standards for Reading Comprehension and Analysis of Text California State Standards.

In addition to a standards based graphic organizer, student-friendly objectives were
included in the materials to be used by teachers, including key definitions and sentence frames.
Each graphic organizer was intended as a “One-Stop Reference Sheet” when reviewing or
assessing progress on each comprehension goal.

Appendix B houses consists of a copy of every word list, worksheet, activity and graphic
organizer developed for the IEP Goal Based Progress Monitoring Resource, organized by grade
level and language arts sub standard. In addition to the materials structured by grade level,
Appendix B also houses other student and teacher resources provided under the “Additional
Resources”. More specifically, the “Additional Resources” section included useful word lists, a
phonics and decoding screening, as well as spelling and vocabulary activities. Furthermore, the
website contained links to supplemental curriculum districts commonly used for intensive
intervention.
Chapter Five: Conclusions

As a novice education specialist, the researcher personally struggled with trying to find objective measures for monitoring the progress of her students towards achieving IEP goals. Aside from standardized assessments to ascertain student academic performance levels, a majority of the information available to measure annual student progress derived from subjective, teacher-made activities and assessments. The researcher observed first-hand the problems documented by existing research (Fuchs, Deno & Mirkin, 1984) which arise from the use of individualized teacher-made assessments to measure goal progress in that there was no consistency in the progress evaluations of her students over time.

In order to address this lack of useful information, the researcher created a resource-sharing website for education specialists working in her district. The goal of the website was to allow all of her district’s education specialists to utilize the same materials in order to encourage a more consistent measurement of similar annual IEP goals among the students in the district. The website materials are not intended to provide uniformity in instruction. The intent of the researcher was that education specialists in the district continue to teach and reinforce the skills necessary to achieve student’s annual IEP goals in their own style, with their own activities and lessons. However, the website was intended to provide a set of materials used consistently throughout the district to make quarterly assessments of the district’s students progress toward annual goals more objective, consistent and meaningful.

Creation of the IEP Goal Based Progress Monitoring Resource website, together with the steps necessary to achieve full implementation of the project are described in detail below. The discussion includes recommendations for the use of the website, including current best practices within the industry. Moreover, project limitations; both natural and researcher-set
limits are described. Finally, potential areas of further research, including suggestions and feedback received from the anonymous survey critiquing the *IEP Goal Based Progress Monitoring Resource* website are outlined.

**Lessons Learned**

Depending on school climate, education specialists may perceive themselves to be isolated in a sea of general educators. General educators are organized by grade-level teams, with colleagues to collaborate, plan and share ideas. Different school sites have more or less open collaboration. Challenges for education specialists arise when teaming with general education teachers is difficult due to the learning needs of students with disabilities or the prevalent attitude among a particular school’s teachers. This problem is exacerbated by the common practice whereby one education specialist teaches lower elementary, while the other, at the same site, teaches upper elementary, leaving very little common ground on which to collaborate. Even assuming a desire among special educators to do so, time and logistical demands make it challenging for special educators at different school sites to meet on a consistent basis.

Anecdotal evidence from the researcher’s personal experience supports this point. The school district that employs the researcher had no resource for education specialists to share ideas or materials. Unless the researcher asked another education specialist what materials he or she utilized to measure a specific annual goal, progress monitoring was left entirely to her discretion. As a new teacher, she found this lack of cooperation among special educators to be extremely confusing and frustrating. This confusion was compounded when the researcher began questioning the validity of the progress monitoring reports of her students. However, by observing consistent cooperation, idea and material sharing between general education teachers,
the researcher concluded that a resource sharing website could function to increase collaborative efforts. The researcher’s rationale for this conclusion was that if collaboration benefited the general education teachers, it would also benefit education specialists.

An informal survey of other special educators in the same district indicated that this frustration was widespread. Out of twenty-two education specialists invited to participate in the survey, eight responded. Survey participants were asked, “How objective do you feel your current system for measuring IEP goal progress is?” Survey responses were analyzed via a Likert Scale ranging from Completely Objective, Somewhat Objective, Somewhat Subjective and Completely Subjective. Responses found one (12.5%) of the education specialists surveyed felt their progress monitoring system was completely objective, two (25%) felt their system was somewhat objective, while 4 (50%) of the participants responded that their system was somewhat subjective and one (12.5%) participant said his or her progress monitoring system was completely subjective. The survey also asked, “How consistent do you feel your IEP progress monitoring system is with other education specialists in the district?” The survey responses were also analyzed with a Likert Scale ranging from Very Consistent, Somewhat Consistent, Inconsistent to Unsure. 43% of survey participants felt their progress monitoring system was somewhat consistent with other education specialists, while 57% felt their system was inconsistent with others.

Another lesson learned through the project, was to always ask questions. Although, it may seem obvious from a logical standpoint, others are likely to have similar questions. Throughout the process of gathering and coordinating resources for the IEP Goal Based Progress Monitoring Resource website, the researcher sought help from the Literacy Coach at her school site. At first, the researcher was embarrassed to ask for district resources, including
grade level specific vocabulary (synonyms, antonyms and homographs). However, through conversation with the Literacy Coach, she ascertained that the district had never compiled vocabulary lists by grade level. The Literacy Coach agreed that a grade-level specific list of vocabulary words would be beneficial to everyone in the district.

Through the work done on the project, the researcher realized that other educators were likely to be questioning or wondering about the same aspects of instruction or assessment. Therefore, the researcher opened the project to include on the website resourced developed by other education specialists to the extent they were willing to share them.

**Project Implementation Plans**

The first step towards implementing the *IEP Goal Based Progress Monitoring Resource* was requesting feedback and suggestions from education specialists in the researcher’s school district via an anonymous online survey. The website was activated for a trial period to gather suggestions, criticism and critiques from others working in the field. The majority of the feedback generated was positive. Open-ended responses allowed survey participants to share their opinions. A few examples of positive feedback included, “Thank you for focusing on something that will help improve teaching practices, learning outcomes, and help all involved make every minute count,” “Your site synthesizes multiple resources, providing educators the ultimate gift of time,” “This project is intelligent and most helpful, thank you for making all our jobs easier,” and “I think this is a great idea, I am always looking for progress monitoring pages.” The researcher concluded from the positive feedback, that there existed a need for a web-based resource such as the one envisioned by the project.

First, the researcher planned to personally utilize the site for quarterly goal progress monitoring her students’ English Language Arts standards based goals in the upcoming
academic year. The researcher has an IEP Goal Folder for each student, and resources specific to their individualized goals are kept in their folder to show annual growth towards goal mastery. The researcher also invited other education specialists, who showed an interest in the website, to access the materials and use them consistently to gauge progress.

After the first marking period, when education specialists reported on each student’s progress towards academic, social and behavioral goals, the researcher sent out a supplemental survey to the educators who utilized the website. The second survey addressed their successes and difficulties using the resource, and whether they plan to continue using the materials for the upcoming quarter.

By the second marking period, feedback was generated which can be presented to the Director of Special Education in the researcher’s school district. This meeting determined if the IEP Goal Based Progress Monitoring Resource website was applicable for widespread use. At some point, with feedback strongly in favor of the website, the researcher hopes to expand the scope of IEP Goals covered to include English Language Arts, Writing, Mathematics, Social Skills, Behavior, Self Help Skills, etc… for all grade levels, beginning with Kindergarten through fifth, and expanding up through twelfth if applicable.

**Educational Implications**

In order for IEPs to be legally compliant, annual goals need to be individualized based on the learning needs of each student. The IEP Goal Based Web Resource was not designed to replace existing lessons and activities modified to each student’s ability levels. Instead, the materials and resources available on the website were designed as an assessment tool given prior to each quarterly reporting period.
The materials available via the IEP Goal Bank Web Resource were designed to assist educators in a variety of ways. First of all, the grade level sight word/high frequency word lists are not intended to replace best practice, high quality, multi-modal instruction, but rather offer consistent materials to be utilized in measuring progress. Also, reading fluency procedures and charting templates were designed for use with any type or level of text, depending on the student’s reading ability. Furthermore, goal specific vocabulary assessments were derived from grade level specific vocabulary words. In addition to the activities provided, an overall word-list was compiled to assist educators in creating interactive lessons and activities prior to the assessment. Finally, each standard specific graphic organizer can be used to cover a wide variety of grade level texts, depending on each individual student’s reading comprehension ability. The purpose of these materials was to offer routine and similarity to encourage teacher acceptance of the materials and to provide consistency within the resources.

Additional resources will continue to be added, as requested by fellow education specialists. The researcher established an inclusion standard for such resources requiring that any included resource must serve the purpose of providing quarterly assessment material. Interactive lessons and activities to enhance instruction and repeated practice of each grade level standard were also welcomed, but were added to a section entitled “Additional Resources”.

Limitations of Project

The researcher set limitations on the scope of the IEP Goal Based Web Resource. Annual IEP goals were based on California State Standards for English Language Arts, specifically grades two through five. Furthermore, education specialists invited to participate in the survey were resource specialists or special day class teachers of students with mild/moderate disabilities employed by the same school district as the researcher. Moderate/Severe education
specialists and general education teachers were not included as participants in the project-based survey.

A great deal of the research analyzed during the literature review portion of the project focused on the use of Curriculum Based Measurement (CBM) as an objective progress monitoring strategy. In order for CBM to be successful on a district-wide basis, educators need to be trained in the implementation routines and graphing results. The resources for the IEP Goal Based Web Resource did not follow CBM guidelines, since training was not available for all survey participants. Instead of creating CBM based measurements, the web resource materials were created with CBM principles in mind, such as frequent progress monitoring to enhance instructional decisions as well as objectivity and consistency among educators.

With proper training and implementation, Curriculum Based Measurement would address the need for consistent progress monitoring throughout a school site, or school district. If this training were available to researchers and participants, then the IEP Goal Based Web Resource could also be expanded to include CBM fluency probes and graphing materials.

There are several naturally occurring limitations of this project. First of all, the project was completed over the summer semester, so feedback from fellow educators was less than anticipated. Out of twenty two surveys requested, only eight were returned, even after a second request. The volume of feedback was directly related to the number of improvements and changes made to the website prior to implementation. Other natural limitations included the lack of district-provided resources, which resulted in a need to independently research grade level sight words and vocabulary words. The materials included on the web site were based upon the existing California State Standards as outlined in an existing electronic IEP Goal Bank.
Future Research and Project Suggestions

As discussed above, many suggestions via survey feedback were utilized to make changes to the IEP Goal Based Progress Monitoring Resource. Survey participants were interested in commonly misspelled word lists, as well as a Phonics and Decoding screening. At their request, the researcher added these materials under “Additional Resources.” Another recommendation was for a portal on the web resource to download resource samples completed by students so future teachers have access to work samples for consistent communication between transitions. This suggestion was greatly appreciated by the researcher, and she hopes for the IEP Goal Based Progress Monitoring Resource to have this capability in the future.

In addition, the web resource project was structured to accommodate expansion to include all subject and competency areas outlined in the existing IEP Goal Bank, for all grade levels. To complement the assessment materials designed for quarterly progress monitoring, a resource sharing aspect of the website allows educators to contribute activities, lessons and materials they use to reinforce instruction and provide ample practice opportunities prior to administering an IEP Goal Based Progress Monitoring Resource assessment activity.

The IEP Goal Based Web Resource, as it expands based on contributions by users, will, hopefully, provide consistent materials for progress monitoring of annual IEP goals. This is anticipated to lead to effective instruction, because frequent, consistent measurements allow educators to analyze whether instructional changes need to be made. If the same resources are used consistently, the researcher believes this will enable educators to gauge whether their students are making adequate academic growth towards meeting their IEP goals.

The idea for the IEP Goal Based Web Resource grew out of the researcher’s recognition of a gap in previously reviewed literature. The researcher found, through both scholarly
academic journal and Internet searches, little information was available regarding a “go-to” resource for special educators to utilize to measure goal progress. Identifying this gap in research studies, paved the way for the project, as well as demonstrating a need for a prospective study on the educational outcomes, for both educators and students, of the IEP Goal Based Web Resource.

A future study and survey would be necessary to fully analyze the usability and reliability of the *IEP Goal Based Progress Monitoring Resource* once implemented as a resource in multiple classrooms in the researcher’s district. This study could involve education specialists teaching students with mild/moderate disabilities in grades second through fifth. The research participants could be asked to utilize the web-resource to monitor IEP goal progress for one marking period using the materials, activities and recording logs provided by the web resource. The participants could complete a pre-implementation survey and questionnaire to ascertain baseline opinions prior to using the IEP Goal Based Web Resource. The research participants could then use the materials from the website to monitoring IEP goal progress for English Language Arts standards. Finally, a post-implementation questionnaire could be completed to determine participant opinions after utilizing the website.

**Summary and Conclusions**

Over the course of project, the IEP Goal Based Web Resource emerged as a material-sharing portal for consistent communication and progress monitoring on annual IEP goals. In Chapter One, the stage was set; the lack of consistent materials and existing practice of using teacher-made assessments was identified, use of which led to subjective monitoring of IEP goal progress (Fuchs, Deno & Mirkin, 1984). The inconsistent nature of IEP goal progress provoked the research question, “what objective progress monitoring and data collection strategies for IEP
goal evaluation exist among education specialists?” This question initiated the review of literature.

Available research indicates Data Based Progress Monitoring (DBPM) and Curriculum Based Measurement (CBM) are the most frequently and effectively used progress-monitoring procedure for students in various language proficiency, ability and grade levels. (Baker & Good, 1995; Christ, Silberglitt, Yeo & Cormier, 2010; Lembke, Garman, Deno & Stecker, 2010)

DBPM and CBM are similar procedures that track student progress, and prompt instructional changes depending on his or her growth towards the desired goal. Educators use CBM to measure Adequate Yearly Progress (AYP), Response to Intervention (RTI), as well as IEP goal mastery (Fuchs & Fuchs, 2004; Lembke, Garman, Deno & Stecker, 2010; Codding, Skowron & Pace, 2005).

Although CBM fluency prompts are an effective measure for various content areas and offer brilliant insight on student’s current performance levels, the prompts do not align specifically to all of the IEP goals found in a California Standards Based Goal Bank. As a result, gaps in current research prompted additional questions geared towards evaluating a web-based resource aligned specifically to standard’s based IEP goals. Two questions arose: (1) Is a web-based IEP goal monitoring resource database a useful tool for consistent evaluation? (2) Will a web-based resource improve communication of IEP Goal evaluation? In order to address these research questions, the IEP Goal Based Web Resource was created to enhance resource sharing and consistency between education specialists, and feedback was encouraged via an anonymous survey of education specialists.

The IEP Goal Based Web Resource focused specifically on English Language Arts Standards for grades two through five, specifically, Word Analysis, Fluency and Decoding,
Vocabulary Development, Reading Comprehension and Analysis of Text. Within each category per grade level, resources and materials were created in both teacher and student format for consistent use by education specialists when measuring the same annual goal. The resources consisted of sight word, nonsense word and complex word family lists, as well as vocabulary activities aimed to assess proficiency in antonyms, synonyms, homophones and homographs. In addition, graphic organizers were created that aligned specifically to each of the grade level standards. The graphic organizers were designed in a student friendly format, containing objectives and review of academic language necessary to complete each activity.

In order to address the research questions, survey results were analyzed. Of the eight surveys returned, all participants indicated the IEP Goal Based Web Resource is a tool geared towards consistent monitoring of annual goal progress. Six participants indicated a consistent belief that the IEP Goal Based Web Resource will improve communication of annual progress between students, families and other educators. The participants offered the following insights, “The website will put everyone on the same page when using word lists,” It will be great for future teachers of the student for consistency, “We will all test and write goals based on the same materials,” and “It would be nice if all of us were able to use similar tracing documents, especially for inter/intra district transfers.”

In an environment where the spirit of collaboration between educators is on the rise, education specialists need not be left behind. Sharing resources, materials and strategies will help connect education specialists from different school sites via web-based collaboration. With an IEP Goal Bank available online to assist education specialists with writing legally compliant annual IEP benchmarks, a natural progression would be to supplement the existing goal bank with additional resource with progress monitoring materials aligned to each standards based
goal. IEP goals, lesson materials and teaching styles are adapted to meet the academic, social and behavioral needs of students in the special education population. The IEP Goal Based Web Resource was not designed to replace existing best practices for teaching these students. Instead, the web-resource was designed to complement instruction to achieve a more objective means of assessing goal mastery in a reliable manner. With proper implementation and acceptance, the IEP Goal Based Web Resource can bridge the collaborative gap between education specialists, and when this happens, educators, students and families should all benefit.
Resources Cited

Anonymous, Individuals with Disabilities Education Act, 612(a), (2004).


http://www.spellingcity.com/antonyms.html


http://www.spellingcity.com/synonyms.html


School Psychology Quarterly, 26(2), 119-130.
Appendix A

Survey Questions

1. Are you a Resource Specialist or Special Day Class Teacher?
   Do you teach students with Mild/Moderate or Moderate/Severe Disabilities?
   Which grade levels do you teach?
   Please check all that apply.

2. Do you use an IEP Goal Bank when writing IEP Goals?

3. How objective do you feel your current system for measuring IEP goal progress is?

4. How consistent do you feel your IEP progress monitoring system is with other education specialists in the district?

5. Do you create many of your own materials to monitor IEP goal progress? If yes, approximately how many hours per student?

6. In order to respond to the following questions, please visit
   If this website were made available to education specialists including teacher resources to monitor IEP goals aligned to the online IEP goal bank, would you utilize it?
7. Are the available resources valuable to you for creating progress monitoring for IEP goals? Please provide feedback.

8. Are there existing resources that you utilize for IEP goal progress monitoring that you would like to see added to this website? Please submit objective measures or assessments.

9. In what ways do you feel this website will increase consistency among education specialists in terms of materials used to monitor IEP goal progress?

10. Please provide feedback or insights which you feel would increase both the effectiveness of the website and/or the likelihood of using this website yourself.