Accelerated Student Achievement in American Title 1 Elementary Schools

"Stop-Gap and Bridge Resources"

A Detailed Analysis and Pragmatic Implementation of Two Unique Curricular Resources Designed to Accelerate Students to Grade Level Core Curriculum and Provide Daily Rigorous and Application in All Core Subjects – with Proven and Sustained Title 1 Elementary Student Success

Part 2 of 2

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Executive Summary

This white paper focuses on two (2) curricular resources – stop-gap and bridge resources – that support the rapid academic reformation of urban and rural Title 1 elementary schools. It is also a companion document to the concept paper entitled, "Accelerated Student Achievement in Title 1 Elementary Schools." Since the academic reformation process described in this document illustrates a unique and results-proven approach to Title 1 elementary school academic turnaround, the paper provides a highly detailed analysis in addition to the pragmatic implementation steps for these two (2) uniquely designed curricular resources. Both resources do not replace any aspect of the daily core curriculum, but they symbiotically supplement and support the adopted core curriculum, ensuring student academic success.

This curricular methodology is also applicable to non-Title 1 elementary school student populations classified as either at-risk or economically disadvantaged. The comparably depressed academic outcomes of at-risk or economically disadvantaged students enrolled in high socioeconomic schools is due to the same academic literacy and numeracy skill gaps commonly exhibited by students attending Title 1 elementary schools. Regardless of the geographical location, these academic skill gaps are overtly inconspicuous in an elementary school's standardized assessment report card. As standardized test results are released to the public beginning in third grade, students' academic skill gaps are manifested in the infamous achievement gap – an academic performance separation between children of poverty and their more affluent peers as measured by standardized testing outcomes. In a word, the achievement gap is actually an indirect measure of a students' academic literacy and numeracy skill gaps.

From both an operational and instructional school perspective, all traditional and charter public schools may be separated into three (3) discrete management areas: 1. Systems, 2. Resources (Curricular) and 3. Personnel. For effective academic turnaround, this sequence is also the precise ordering on which a Title 1 campus administrator must focus his or her managerial attention. Both schoolwide and classroom systems must be the first managerial priority of the campus administration for either a Title 1 or non-Title 1 elementary school. The third and last management area that principals must address is school personnel with respect to academic turnaround. Both systems and personnel management are discussed in the concept white paper referenced above.

The second school managerial area of academic Title 1 elementary school turnaround and the focal premise of this paper is curricular resources. Curricular resources are also parsed into three (3) distinct types. Those three areas are the following: *stop-gap resources, adopted core curriculum, and bridge resources*. The adopted daily 'core curriculum' for reading, math, writing and science is designed for grade level standards, and it is invariably a commercial vendor purchase. It is usually selected by district personnel and/or the school's administration based on the organization's educational philosophy. Adopted grade level core curriculum frequently varies from school to school or district to district across the United States.

In the typical Title 1 elementary school in this country, the majority of students possess literacy and academic skill gaps. This situation places Title 1 classroom teachers in a difficult instructional position. Since significant numbers of students attending Title 1 elementary schools lack prior grade level background knowledge (e.g. literacy and numeracy skill gaps), they are not successful with the daily lessons from the core curriculum. Despite this fact, at the onset of every new school year, campus administrators distribute to every classroom teacher the school's core curriculum – a core curriculum designed on grade level student expectations and current Standards (i.e. Common Core State Standards, or CCSS, and Texas Essential Knowledge and Skills, or TEKS).

By the end of the school year and after another round of standardized tests, regardless of teacher training or teacher experience, the vast majority of Title 1 elementary school classroom teachers are largely ineffective with a significant percentage of their students. However, with the use of simply designed '*stop-gap literacy and numeracy (curricular) resources,*' the mass of students classified as at-risk and economically disadvantaged students may be pressed to grade level skill capability. Independent of geography and

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elementary school socioeconomic status, academic skill gaps are narrowed and closed. Children of poverty acquire and possess the same prerequisite background knowledge skills that are tacitly embedded in the design of the adopted core curriculum. Thus, students are readily able to comprehend the learning connections implicit in the daily core lessons.

The third and last type of curricular resources are '*bridge resources*.' Bridge resources have a different design and practical intent than stop-gap resources or the adopted core curriculum. Bridge resources are utilized daily throughout the school year in reading, writing, mathematics and science, and their singular objective is to provide students application opportunities with the rigor of grade level learning standards (CCSS or TEKS). These daily resources may be commercially purchased or created in-house.

A high percentage of academic reform models attempt to provide autonomy to school personnel without assuming academic accountability, or they exclusively focus on personnel training to improve rural and urban Title 1 schools. For the most part, these reform measures have exhibited only limited academic transformation success. It is the author's opinion and professional experience that this is the incorrect methodology and sequencing to accelerate Title 1 school reform. Establishing effective and efficient schoolwide and classroom systems, implementing unique curricular resources (i.e. stop-gap and bridge resources) and training school personnel on their implementation has proven to heighten and sustain academic student performance. For any interested educator or stakeholder desiring a systematic and empirical approach, these two (2) white papers provide a comprehensive view to proven academic Title 1 elementary school academic turnaround. They afford a *common solution to common academic inequities* for any rural or urban Title 1 elementary traditional or charter school in the country.

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Stop-Gap and Bridge Resources

The Right Resources:
"Effective Title 1 Elementary School Academic Reform"

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"Stop-Gap and Bridge Resources"

The Right Resources
Effective Title 1 Elementary School Academic Reform

There have been a number of Title 1 elementary school academic reform models implemented in the United States over the last fifty years, but the vast majority of these reformation movements did not result in heightened and sustained academic student performance. This document's primary intention is to accentuate and focus on two (2) curricular resources that drive rapid academic reformation of Title 1 elementary schools. It affords a highly detailed analysis of the design and pragmatic implementation of both 'stop-gap and bridge resources.' It is a companion white paper that expands and expounds on the 'Right Resources' section in the overarching concept paper, "Accelerated Student Achievement in Title 1 Elementary Schools." This methodology provides a replicable, inexpensive, proven and highly effective accelerated approach to elevate student outcomes in urban and rural Title 1 elementary schools.

An elementary school – regardless of socioeconomics – can always be separated into the following three discrete areas of management operations or functions: Systems, Resources (Curricular) and Personnel. It is the author's professional opinion and experience that effective Title 1 academic reform must be approached in that specific order – systems first, then resources and lastly, personnel. Too many school reformation models first attempt to isolate, address and develop teachers or improve pedagogy in the classroom. However, based on that approach, academic improvement efforts are chronically anemic and student outcomes rapidly plateau with only relatively minor academic gains. Teaching personnel is critically important, but the other two functional, managerial areas must be prioritized. At that point, campus personnel may be trained in the classroom implementation of highly effective and efficient systems and unique curricular resources. These classroom curricular resources are one of the primary drivers to effective academic reform in Title 1 elementary schools. Although teaching personnel is last on the order, the selection of the campus principal is paramount to the academic turnaround of the campus. The lead administrator controls the direction of social emotional learning and academics on the campus along with the campus' student and teacher accountability. Therefore, the probability for meaningful and sustained academic reform is significantly lessened if the principal does not possess high organizational and instructional acumen, analytical and interpersonal people skills, and an understanding of the need for rapidly heightening student academic outcomes at the campus.

As noted, the first managerial or functional focus of academic school reform that must be addressed is the implementation of effective and efficient schoolwide and classroom systems. That operational emphasis as well as the training and hiring of campus personnel is discussed in detail in the overarching reformation white paper entitled, "Accelerated Student Achievement in American Title 1 Elementary Schools."

School Managerial Reformation Schematic

The School Managerial Reformation Schematic shown below in Figure 1 illustrates the functional aspect of Systems, Resources and Personnel. These three functional elements of school managerial reform are listed vertically to the left and each of those elements is horizontally expanded to provide a secondary, more discrete breakdown.

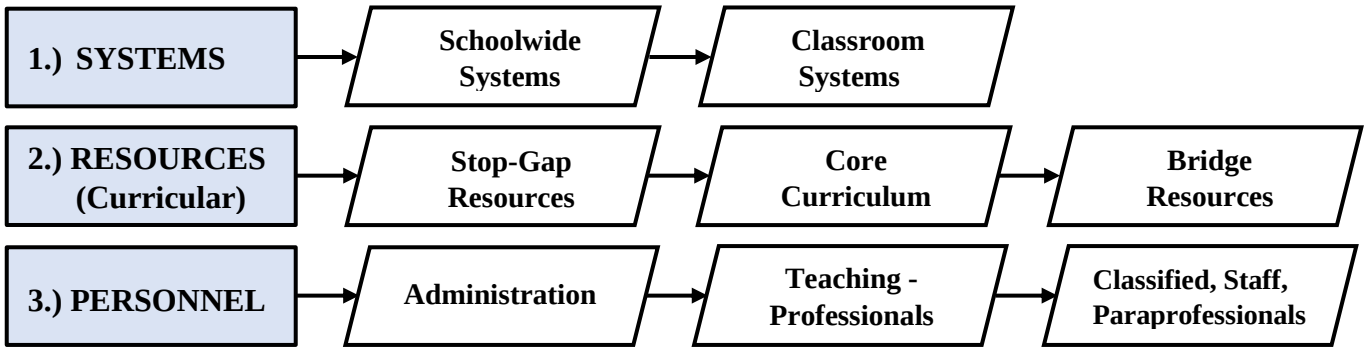


Figure 1 – School Managerial Reformation Schematic

Stop-Gap and Bridge Resources - General

As can be seen from Figure 1, Resources (Curricular) are separated into three (3) discrete components: Stop-Gap Resources, Core Curriculum and Bridge Resources – a curricular resource breakdown that is unique to this academic school reform model. The *daily core curriculum* (i.e. adopted instructional resources based on grade level CCSS or TEKS) is a grade level staple in all public schools, and it is usually selected by campus or district personnel. It is invariably a commercial purchase with a four-to-seven year adoption window. However, both stop-gap and bridge resources are distinctive to the academic transformation Title 1 model, and each resource possesses an intrinsically designed singular objective. For that reason, this document provides and details the design features and pragmatic implementation of each resource.

It is important to note that the heightened academic effect of these two (2) resources is not solely limited to Title 1 elementary schools. These two resources also assist classroom teachers at non-Title 1 schools with those schools' similar demographic, albeit a smaller number, of students classified as economically disadvantaged. From a general perspective, students classified as economically disadvantaged often possess academic literacy and numeracy skill gaps independent of the socioeconomic status of their school location. Nevertheless, with focused stop-gap resource implementation, the fundamental academic literacy and numeracy skill gaps may be directly addressed and eliminated regardless of the socioeconomic school setting. Hence, the infamous achievement gap is narrowed and eventually, closed between high and low socioeconomic status elementary schools or between two (2) economically classified student groups enrolled at the same non-Title 1 elementary school.

Stop-Gap Resources: Literacy and Numeracy

The critical elements that academically separate children of poverty from their more affluent peers are academic literacy and numeracy skill gaps. Many students who are classified as economically disadvantaged enroll in Title 1 elementary schools in prekindergarten with inequitable academic literacy gaps. These literacy (and numeracy) gaps widen as children of poverty progress through elementary school. In general, numeracy and literacy stop-gap resources are designed to accelerate struggling academic students 'back' to grade level curriculum by rapidly filling these academic skill gaps. The length of time required to accelerate students to grade level is different for mathematics than it is for reading. In a Title 1 elementary school, mathematics skill gaps can be rectified in only one school year with the use of an effective differentiated numeracy program; however, grade level reading requires between one to two school years to significantly reduce literacy skill gaps. Accordingly, both the numeracy and literacy stop-gap resources are designed to dramatically remedy basic skill gaps by the time students are in the third grade.

The importance of closing these academic skill gaps cannot be overemphasized. All grade level core curriculum is designed for grade level State or Common Core Standards. But, as long as these skill gaps remain unaddressed, Title 1 classroom teachers will encounter significant numbers of students that are not connecting to the daily core curriculum lesson. Regardless of the classroom instructional technique – direct instruction or small group, the teacher will experience depressed levels of student achievement unless literacy and numeracy stop-gap curricular resource programs are implemented to eliminate academic skill gaps.

If the academic skill gaps are **not** addressed and closed by or during third grade – usually, the first year of standardized testing in most states – the typical Title 1 intermediate classroom teacher is placed in a difficult instructional position. As in all schools, the teacher presents daily lessons in mathematics, reading and writing using the school/district's selected grade level core curriculum. However, as stated, all grade level core curriculum is designed for each State's grade level standards – whether the standards are Common Core State Standard (CCSS) or the Texas Essential Knowledge and Skills (TEKS). The core curriculum assumes that each student is academically on-grade level and has mastered dependent prior grade level skills. For example, regardless of vendor or curriculum publisher, the third grade reading or math core curriculum is designed with the premise that a third grade student has prerequisite skill mastery of prekindergarten through second grade standards (i.e. meaning a student possesses few to no literacy or numeracy academic skill gaps from prior grade levels). However, in Title 1 elementary schools, a vast majority of students possess significant literacy and numeracy skill gaps that have continued to widen each school year since his or her enrollment in prekindergarten or kindergarten. Stop-gap resources – for all practical pedagogical purposes – assist in eliminating or drastically reducing a typical Title 1 classroom's daily necessity for instructional differentiation in core lessons. Consequently, as students are accelerated to grade level prowess, the core curriculum is effective for all students, as it was designed.

Empirical Graphical Analysis Using Literacy and Numeracy Stop-Gap Resources

As children's academic skill gaps narrow, the adopted core curriculum – designed for grade level skills and standards – becomes connected and sequenced for students. As this transformation occurs, the Title 1 classroom teaching environment quickly mirrors that of a non-Title 1 elementary school setting. An empirical graphical model of this accelerated academic conversional progression is shown in Figure 2 and entitled, "Title 1 Academic Transformation using Stop-Gap Literacy and Numeracy Resources."

Diagram A depicts a typical non-Title 1 classroom or elementary school. As expected, the majority of students' prerequisite content and skill knowledge is above the 'background knowledge' line; hence, most students are academically prepared (i.e. little to no academic skill gaps) for daily classroom lessons using his or her school's adopted grade level core curriculum. Since almost all instructional core curriculum resources are designed with the premise that students are on-grade level, the vast majority of students are generally successful with the daily core lessons using the adopted school or district curriculum. The students that are below the 'background knowledge' line will struggle in classroom daily lessons using grade level curricular resources. This small group of students will require interventions to rectify this condition. The interventions are generally from teacher tutoring and/or parent assistance at home; however, parents at non-Title 1 schools largely possess financial resources. Thus, many students from affluent homes receive additional tutorials and interventions several times per week from an external vendor specializing in after school tutorial services.

In Diagram B, a similar graphic is displayed for a typical Title 1 elementary school; conversely, in this schematic, the mirror image of Diagram A is depicted. Diagram B illustrates the academic dilemma of the typical Title 1 classroom or elementary school in this country. It translates or shifts vertically depending upon the percentage levels of students qualifying for free and reduced lunch – meaning the fewer students on free and reduced lunch, the oval in Diagram B vertically shifts upward toward the non-Title 1 classroom depiction illustrated in Diagram A. Like in Diagram A, in Diagram B the grade level core curriculum is also presented to students in classrooms without the prerequisite 'background knowledge' (i.e. academic numeracy and literacy skill gaps). However in this classroom, most students are not prepared to readily grasp and connect with daily core lesson content. Using a simple analogy borrowed from an E.D. Hirsch, Jr. article, *a classroom teacher is conveying an entertaining anecdote or joke that all students in his or her class should find amusing.*

However, the vast majority of the students do not laugh at their teacher's comical joke – or simply put, the students do not 'get it.' Many of the students do not understand the levity of the teacher's joke since they do not possess the necessary background information to comprehend the basis of why the joke is witty in the first place. In pedagogical terms, those students possess academic skill gaps in both literacy and numeracy and do not readily grasp the grade level core curriculum – the teacher's humorous anecdote or joke.

There is both a short-term and a long-term consequence of Diagram B. First, if this pedagogical situation is left unaddressed for the typical Title 1 elementary classroom or school, those students face a long-term, dire economic future as adults entering the work force. Second, in the short term, with so many students attending Title 1 schools performing academically below grade level, it is an arduous task for any teacher to present grade level lessons when so many students possess a wide scattering of prerequisite 'background knowledge' to actively engage. The typical Title 1 classroom teacher is generally placed in one of the two following equally distasteful pedagogical situations. Does the classroom teacher slow the daily core lessons to an instructional snail's pace and include a myriad of background lessons, so students may understand the grade level core lesson? Or, does the teacher continue the recommended pacing guide of the core curriculum daily lessons and leave a significant percentage of their students behind? It has been the author's experience that most teachers choose the latter. Finally, this classroom situation may be even more challenging when students do not possess the background skills to actively participate in the lesson. Frequently, some children engage in off-task, distracting behavior that further decelerates student learning, performance and time on task.

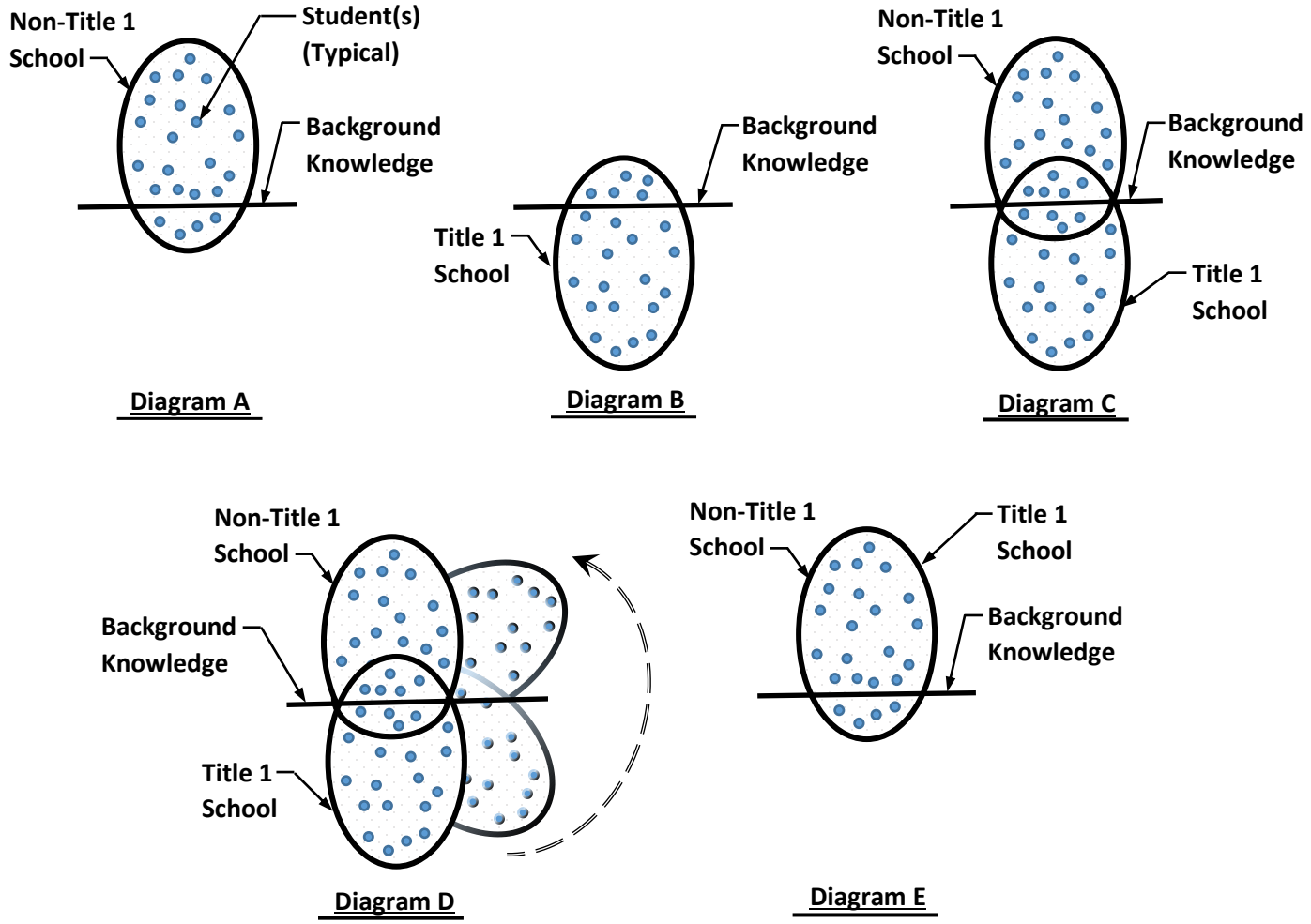


Figure 2 – Title 1 Academic Transformation using Stop-Gap Literacy and Numeracy Resources

Most educators are all too aware of the academic situation and the endemic problems in our Title 1 schools. Diagram C depicts both school types on the same schematic to clearly illustrate the mirror image of the two socioeconomic status school's academic positions. The stop-gap literacy and numeracy programs consistently implemented with integrity greatly remedy the pedagogical challenges in American Title 1 schools. As illustrated in Diagram D, these stop-gap programs quickly rotate the academic environment at the typical Title 1 School or classroom until it repositions itself as an equitable non-Title 1 school depicted in Diagram E. The result is that the teachers at the Title 1 School are equally as effective with student learning and academics as their professional colleagues in the higher socioeconomic, non-Title 1 school setting. Similarly, children of poverty equitably achieve on standardized assessments as do their affluent peers, and the learning environment is fundamentally positioned where grade level curricular resources are effective. In a word, at-risk children's typical numeracy and literacy gaps are narrowed and they readily understand their classroom teacher's joke (e.g. grade level core content). In Diagram E, students attending Title 1 schools that are below the background knowledge line require additional intervention from instructional specialists or afterschool remedial tutoring. Those students' parents usually cannot afford the cost of an external commercial tutoring service, unlike their more affluent peers' parents.

An effective differentiated stop-gap numeracy program academically transforms the academic status of a Title 1 elementary school into that of a 'virtual' non-Title 1 school in one year. However, the literacy stop-gap resources time frame is between one to two years depending on the student demographics of the Title 1 elementary school. These same stop-gap resources are also needed in non-Title 1 elementary schools to address any academically struggling students as well as a small group of students classified as economically disadvantaged. The only real difference between economically disadvantaged students attending Title 1 Schools to similarly classified students enrolled in non-Title 1 Schools is geography. Both socioeconomic school settings of at-risk and economically disadvantaged students have identical academic literacy and numeracy skill gaps.

General Attributes of Stop-Gap Literacy and Numeracy Resources

Since Stop-Gap Literacy and Numeracy Resources are an additional implementation at an elementary campus, an understanding of the general attributes of these two resources is extremely important to ensure fidelity of their pragmatic use. It is highly recommended that the dynamics of stop-gap resources be thoroughly studied and understood prior to schoolwide implementation.

a.) Stop-gap resources do not replace any aspect of the current school core curriculum. These resources are implemented in addition to the standard core curriculum. Balanced literacy elements, daily core lessons, weekly units for spelling and vocabulary word development, phonics and phonemic awareness, etc. remain unchanged in both the literacy and numeracy daily lesson scheduling process.

b.) Both numeracy and literacy stop-gaps must be simply designed, so school personnel with any level of teaching experience may efficiently and effectively implement the programs. Public school teaching is a unique profession. There is no entry-level work in comparison to almost all professional fields. For example, a seasoned third grade teacher with twenty years of experience has the identical teaching assignment as an entry-level teacher on the same grade level. Thus, if the stop-gap program is simple in design and implementation, the entry-level teacher (e.g. 1 to 4 years teaching experience) may be as equally effective as the veteran teacher. Finally, if there is relatively high teacher-turnover in either a traditional or charter public school, simply designed programs allow newly hired teachers to rapidly and effectively implement and on-board the programs with efficacy.

c.) The stop-gap programs must be independent of any selected grade level core curriculum or state reading, writing and mathematics standards. The stop-gap resources must be fundamentally viable

regardless of the geographical location of the elementary school, state agency core standards and the adopted or selected mathematics and languages arts core curriculum.

d.) Both stop-gap programs must **directly** address student numeracy and literacy gaps. The programs must rectify the academic skill gaps to reduce and eliminate the achievement gap between high and low socioeconomic student's performance outcomes. Finally, as the academic skill gaps are effectively addressed, students continue to the next grade level aptly prepared for its grade level core curriculum.

e.) The stop-gap programs must **not** be financially prohibitive to implement. The literacy stop-gap resources are free and immediate downloads at the web address provided in the footer. The numeracy resource is from Formative Loop. An inexpensive differentiated daily numeracy program based on a fixed annual per student usage that addresses **both** math fact and processing skills.

f.) The stop-gap programs must be implemented in the classroom and closely monitored by teachers and campus administration. Fortunately, all students at the campus are easily monitored via literacy stop-gap spreadsheets and the digital web based Formative Loop product.

g.) The stop-gap programs must **rapidly** reduce the academic skill gaps. The traditional academic turnaround model proposes a timeline up to five years. This time span is too long. Academic results must be quickly realized. If performance results are not realized in one to two school years, there is a high probability that school personnel will search elsewhere to work and not remain at a chronically academically challenging and struggling Title 1 elementary school.

h.) The stop-gap programs must be also scalable to differing levels of student enrollments. Elementary school student enrollments vary between 150 students and over 1,000 students. Effective stop-gap programs must be adaptable and efficiently scalable to wide ranges of student enrollments.

i.) The stop-gap programs are highly effective with reasonably high student mobility. After one year of concerted implementation, the vast majority of enrolled students are academically accelerated to grade level or substantial progress has been accomplished. Assuming twenty-five (25) percent student mobility, the following school year after implementation is manageable. For example, if there are twenty (20) students in each classroom, there are only five (5) possible new student enrollees that will require a first-year dosage of stop-gap resource work. A teacher or an effective and efficient schoolwide intervention system can readily adjust to that level of intervention.

j.) Both stop-gap numeracy and literacy programs cannot compete with other curriculum programs at a campus. These resources must be implemented and symbiotically work in conjunction with the other curriculum programs at either a Title 1 or non-Title 1 elementary campus.

Literacy Stop-Gap Resources

Literacy Stop-Gap Resources – Description, Understanding and Design

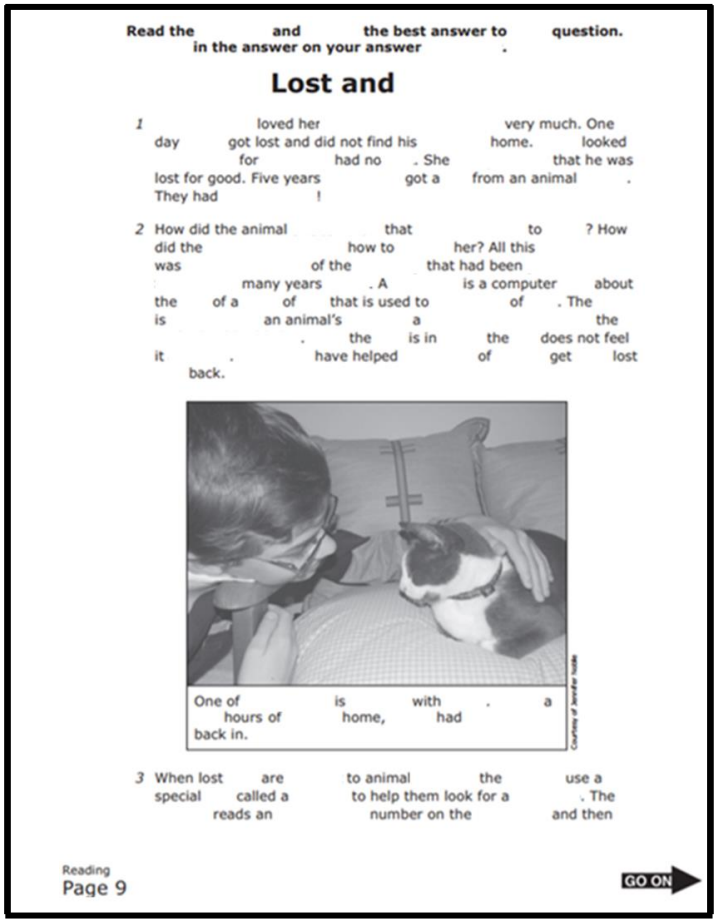
There are two (2) different types of literacy stop-gap resources: Fluency and Non-Negotiable Word Programs. Each literacy program type addresses the academic word skill gaps. The Non-Negotiable Word Program was designed in 2007 to address basic literacy skill gap word issues on the fourth grade standardized Texas Assessment of Knowledge and Skills (TAKS) writing test. Since writing is invariably the last element a child masters in the literacy acquisition process, mastering the correct spelling of the most basic and frequently used English words is pivotal.

In urban Title 1 elementary schools, regardless of race and native home language, a majority of students commonly demonstrate an inability to correctly spell the most rudimentary English words. Professional linguists estimate that approximately twenty-five (25) percent of English words do not follow a basic phonics spelling rule and three (3) percent are so irregularly spelled that their spellings must be rote memorized. Early

literacy acquisition research conducted by Risley and Hart entitled 'The Early Catastrophe' (2003) cited a 30 million word gap for 4 year old children entering school between welfare families and professional families. Their research findings have significant implications for at-risk children's educations.

As children of poverty enter public school, they possess a significant academic language word gap. For all practical purposes, when the literacy academic skill gap is not rectified by the end of second grade, students classified as economically disadvantaged or at-risk are attempting to read grade level comprehension passages with missing words – attempting to connect literal meaning over word omissions. These word gaps often appear in print to a typical third grader as shown in the reading passage as shown in Figure 3 (2017 STAAR - State of Texas Assessment of Academic Readiness reading passage). This situation is significantly magnified for the vast majority of Title 1 English Language Learners (ELLs). Generally, many economically disadvantaged ELL students' sole language exposure to academic English is often limited to public school and television. It has been the author's professional experience as both a teacher and an administrator in urban, Title 1 elementary schools as well as reviewing large amounts of student literacy data, that these children require significant, structured academic English exposure in the primary elementary grades. If not, despite bilingual research citing the contrary, the mass of Title 1 non-native and non-English speakers remain academically behind in both English reading and writing for the remainder of their public school years.

Given these parameters, the typical Title 1 primary teacher faces a difficult pedagogical challenge. The vast majority of economically disadvantaged children begin their formative public school years far behind their more affluent peers in non-Title 1 schools. However, the grade level core daily curriculum implemented in both socioeconomic settings at all elementary grade levels assumes that children possess grade level literacy skills. As is widely understood, this is not the empirical classroom situation in the vast majority of rural and urban Title 1 elementary schools in the United States. Consequently, the adopted or selected daily core curriculum in all elementary grade levels must be viably supplemented with both literacy and numeracy stop-gap resources so it can function as it was designed.



Read the and the best answer to question.
in the answer on your answer .

Lost and

1 loved her very much. One day got lost and did not find his home. looked for had no . She that he was lost for good. Five years got a from an animal . They had !

2 How did the animal that to ? How did the how to her? All this was of the that had been many years . A is a computer about the of a of that is used to of . The is an animal's a the . the is in the does not feel it . have helped of get lost back.

One of is with . a hours of home, had back in.

3 When lost are to animal the use a special called a to help them look for a . The reads an number on the and then

Reading
Page 9

GO ON

Figure 3 – Third (3rd) Grade STAAR Reading Passage illustrating Academic Literacy/Word Gaps

Non-Negotiable "800" English Word Program

As stated above, the writing capability of a language is invariably the last aspect of language acquisition by many students. Hence, in order to directly address this English word spelling academic skill need, the first stop-gap literacy resource, "The 800 Non-Negotiable English Word Program" was created. This literacy stop-gap program consists of the most common words or high frequency words in the English language – specifically, the first eight-hundred (800) English words. It is a second (2nd) grade through sixth (6th) grade program, and twenty-five (25) basic English words are introduced each week for 32 consecutive weeks.

There are two (2) different versions to this stop-gap literacy program and both types are avail-

able for free and immediate downloads. One version contains only the weekly word practice; whereas, the other version includes weekly writing activities. The educator can select which version to implement in his or her classroom. There is also a first (1st) grade literacy stop-gap resource available. This version provides the first (1st) grade student with five (5) basic English words each week and a blank line to write a complete, simple sentence applying each word in context. The first grade version is also available for free download at the same website listed in the footer.

The design of the 800 English word Non-Negotiable Word Program is based on frequency probability of the most common English words. In the 2007-08 school year, the Texas Education Agency (TEA) required all third (3rd) grade students to pass the standardized TAKS reading test. Thus, a third (3rd) grade student was provided three (3) separate attempts to pass the reading examination each spring (March, May and June) in order to be duly promoted to the fourth grade. This TEA stipulation was called the Student Success Initiative (SSI), and it was a fortuitous set of circumstances for the author of this document. All three (3) carefully vetted versions of the 3rd grade TAKS (grade level) reading assessments were released for public review at the conclusion of the TAKS assessment period for each school year. Consequently, the author possessed three (3) versions of the 3rd grade TAKS released test for the four (4) years that were available to the general public – twelve (12) total 3rd grade vetted reading tests.

The statistical frequency of the first 500 words currently in the Non-Negotiable Word Program were calculated in each of the twelve (12) 3rd grade reading released TAKS tests. These common five hundred (500) words were carefully crossed out on each assessment, and the frequency of appearance of those words was computed relative to the total number of English words on each TAKS reading test. The statistical probability of the first 500 English words appearing in a typical third (3rd) grade leveled TAKS reading assessment averaged sixty-seven (67) percent. More importantly, the same statistical analysis on the first 800 English words yielded an average of eighty-four (84) percent frequency probability of the current Non-Negotiable Word Program appearing in those same third (3rd) grade vetted, leveled TAKS reading released tests.

In 2007, there was no time limit requirement for a student to complete the TAKS reading test. Hence, a student could read very slowly, exhibiting functional familiarity with most of the English words on the annual grade level reading assessment, and pass a third (3rd) grade TAKS reading assessment. At that time, those students were considered grade level ready for fourth grade language arts instruction the next school year. This aspect is especially important for English Language Learners (ELLs) who are also classified as economically disadvantaged. Since these students could pass a third grade English standardized test, the student is prepared for both the fourth and fifth grades with English as his or her primary language of instruction. Finally, in-coming fourth (4th) grade students could also correctly spell eight hundred (800) of the most common English words and write basic simple sentences applying that grade level content. Consequently, a typical fourth grade teacher was placed in the favorable instructional position to fundamentally build his or her students' literacy base into a grade level written composition with associated grammar prowess by year's end for the fourth (4th) grade standardized writing assessment.

Non-Negotiable "800" English Word Program – Pragmatic Implementation

The pragmatic implementation of the 800 English word stop-gap literacy program is by design straight-forward; however, the specific steps listed below should assist teachers in both the efficient and effective use of the program. A key aim in using any curricular process is both consistency and student accountability that guarantees and ensures student success each week. The recommendations below are created for regular education students. However, for any student receiving Special Education Services, the Individualized Education Plan (IEP) is a legal document that must be consulted and followed with the utmost stringency. It is important to note that these pragmatic recommendations be modified under those or any other special student circumstances or need.

Non-Negotiable 800 English Word Program – Pragmatic Recommendations/Implementation

1.) **Select the literacy stop-gap Non-Negotiable English Word resource type: 1st grade version, 2nd – 6th grade English Word Program or the 2nd – 6th grade English Word Program with Spelling Activities. Download the literacy stop-gap programs and read the enclosed introduction and recommendations. Available for free download at www.thenew3rseducationconsulting.com**

2.) **It is highly recommended that each student possess his or her own *spirally bound copy* of the 800 English Word Program. The front and back covers of the student copy should be durable 60 to 65 bond weight paper. If each student possesses their own copy, the classroom teacher is not required to make Xerox copies each week, and there is a time-saving efficiency aspect in daily classroom routines of using the program. A spiral bound copy also provides campus educators with a running record of program use. Finally, it is often less expensive to use a local printing vendor or a school district Xerox service than to use a school copier on booklet printing.**

3.) **The classroom teacher should model for students his or her expectations in the manner that each weekly twenty-five (25) word list is to be approached. It is recommended to instruct students to write each word horizontally (Not Vertically!) five (5) times. As the students writes each word, horizontally, they should say the word quietly to themselves and think the word.**

4.) **Students should practice each word list independently and a quick weekly assessment can be given each Friday morning. Student Performance Expectations: 24 – 25 words spelled correctly (Green), 22 – 23 words spelled correctly (Yellow) and less than 22 words spelled correctly (Red). If students are scoring in the "Red" range, those students require more practice each week, not less!**

5.) **Complete the classroom 'Monitoring XLS Spreadsheet' – free download at website address provided in the footer of this document. Email to the campus administration on Friday afternoon.**

6.) **Specific Steps to Ensure and Guarantee Heightened Student Performance Each Week:**

   a.) **After Friday's weekly test, it is recommended that the teacher present the first five (5) words of the next week's twenty-five (25) words. During transition between lessons on Friday, the teacher can require students to number a paper from 1 to 5. Then, the teacher can proctor ad hoc five-word formative assessment(s) on the first five (5) words of the next week's word list. In doing so, the first five (5) words of next week's list are introduced and ingrained.**

   b.) **On Monday, the beginning of the new week, the teacher repeats this pattern, but the quick ad-hoc assessments are the first ten (10) words – *cumulatively*. Students complete word practice in his or her *spirally bound* words for the first 10 words on the list.**

   c.) **On Tuesday, the teacher repeats the pattern, but adds five (5) additional words. Quick assessments are given during transition times for fifteen (15) words, *cumulatively*. Students complete word practice in his or her *spirally bound* words for the first 15 words on the list.**

   d.) **On Wednesday, the teacher repeats the pattern and adds five (5) more words to bring the total to twenty (20) of the twenty-five (25) total weekly words, *cumulatively*. Again, students complete the next 5 words in his or her spiral. Any available paper may be flipped and numbered to twenty (20). This process assures the students are ready for Friday's test.**

   e.) **On Thursday, the teacher assesses all 25 words in a quick pretest. It is highly recommended that the teacher use the test as a diagnostic for each student. After the test, the teacher stresses to students that they concentrate and focus on the words that they are NOT spelling correctly. The teacher emphasizes that each student practice those specific words spelled incorrectly that night in preparation for the following Friday test day. If not, elementary students will practice ALL the words and not focus on the specific words that are spelled incorrectly.**

Non-Negotiable 800 English Word Program – Pragmatic Recommendations/Implementation

f.) If a regular education student is not performing well, it is recommended that the teacher question the student on why he or she believes that they are not doing well. Often, an intermediate elementary aged student will know the reason. The teacher can also ask the student, "How can I help you do better on these spelling tests?" The teacher and student can develop a collaborative plan to guide and improve the child's academic preparation and performance.

7.) Final Note: To permit or ignore a student's poor performance on these basic and fundamental word skills allows the inequity in public education to continue. These skills directly and significantly impact students' writing (and reading) ability. The student must have strong fundamental language skills or subsequent grade level classroom teachers will not inherit incoming students with an established language foundation. Finally, without securing these rudimentary word skills, there is absolute certitude that student performance on the standardized writing assessments administered in both elementary and middle school will be adversely affected. A student unable to demonstrate command of the most rudimentary English words does not possess a literacy base to develop both simple and tertiary sentence structures or to improve and heighten academic vocabulary.

1,000 English Word Fluency Program

In 2012, the Texas Education Agency (TEA) stipulated a time requirement for elementary students to complete each spring standardized core subject assessment. Prior to that time, a student could begin a standardized reading, writing, science or mathematics TAKS assessment at 8 AM and complete the test at 8 PM that evening. With this new TEA requirement, almost all elementary students would be given a four (4) hour time period to complete an annual standardized assessment. This requirement demanded and required that students be more fluent readers than was expected on prior years' untimed assessments.

The 800 Word program's basic design and intention was to academically address the writing issues in fourth (4^{th}) grade due to academic word skill gaps. Of course, as expected, its implementation also positively and significantly impacted students' reading ability as well. As noted, since there was not a time limit requirement to complete a standardized reading assessment and the first eight hundred (800) words had a very high probability of appearing in a typical third grade level reading passage, the vast majority of intermediate students successfully passed the spring reading assessment. But, with a time limit of only four (4) hours, a highly effective and efficient stop-gap word fluency program was required to supplement the 800 Non-Negotiable English Word writing program. If not, many Title 1 students' lack of reading fluency would likely deter them from completing a standardized reading assessment in four (4) hours.

The 1,000 English Word Fluency stop-gap program was designed to symbiotically complement the Non-Negotiable 800 English Word Program. The two literacy stop-gap programs could not compete with each other or both literacy programs' efficacy would be adversely affected. The author decided that, since the first 800 [presented in eight (8) 100-word lists] of the most common words in the English language represented an average of 84 percent of total number of third (3^{rd}) grade words on a typical standardized test, the same words would be repeated in the same order on the fluency program. The fundamental literacy objective was identical to the Non-Negotiable Word Program, but students must read the most common English words more quickly – rather than only spell them correctly.

However, unlike the limitations due to a twenty-five (25) word weekly requirement in the Non-Negotiable Word Program, the fluency program would benefit from additional words. Thus, the next 200 of the most frequented English words were added. This 200-word addition yielded a total of 1,000 English words

to the stop-gap fluency program – ten (10) 100-word lists. In augmenting the total to 1,000 words, it was highly probable that the statistical frequency of English words on a typical third (3rd) grade TAKS or STAAR assessment would be pressed upwards toward the ninety (90) percent threshold. Furthermore, with the addition of a structured weekly vocabulary program, students would be more than adequately prepared for the grade level rigor on any third (3rd) grade assessment in the United States.

In the summer of 2012, the author created the 1,000 English word fluency program for kindergarten through sixth (6th) grade students. The stop-gap fluency program would complement the 800 Non-Negotiable English Word Program, and its stair-stepped design would guide primary-aged students to complete the program in its entirety prior to entering the third (3rd) grade. It should be noted that the kindergarten fluency program contains only the first 100 words of the 1,000 word program; however, the first hundred words were reordered and parsed into monthly sight word lessons. The kindergarten monthly fluency lists are also available for free and immediate download at the website address provided in the footer of this document. First grade students would complete six (6) or more of the 100 word lists, and second graders would complete all 1,000 words – ten (10) 100-word lists. Classroom teachers would hold their students and newly enrolled students accountable to the word lists as indicated in each program's pragmatic implementation recommendations.

Requiring accountable independent reading in both the classroom and at home is critical. Additionally, balanced literacy classroom reading and writing lessons provide an application of word practice. Within one to two years, at-risk children and economically disadvantaged students are academically on grade level in both reading and writing. The fluency program is not complicated in either design or implementation, but it is highly effective since it addresses the academic word gap cited by Risley and Hart (2003).

1,000 Word Fluency Program – Pragmatic Implementation

The pragmatic implementation of the 1,000 English word fluency stop-gap literacy program is also a simple and straightforward common sense implementation process. As with the 800 Non-Negotiable Word Program, the key point in the curricular process with the program is to guarantee and ensure student success each week until the program is completed. As noted prior, any Individualized Education Plan (IEP) of any students receiving Special Education Services must always be consulted and legally followed. The recommendations listed below should be appropriately modified for any special student circumstances.

1,000 English Word Fluency Program – Pragmatic Recommendations/Implementation

1.) **Select the literacy stop-gap fluency resource type: Kindergarten version or 1st – 6th grade English Word Fluency Program. Download the literacy stop-gap programs and read the enclosed introduction and recommendations. Available for free: www.thenew3rseducationconsulting.com**

2.) **It is highly recommended that every 1st through 6th grade student possess his or her own fluency folder. Each 100 word list should be color coded for easy recognition. If a durable plastic folder with brads is used, it is possible to reuse folders for multiple school years. Finally, a different color may be selected for each grade level. In the event a student's folder is lost, the grade level is readily identified so the folder may be returned.**

3.) **The school administration should consider purchasing five (5) quality Smart Pal ® dry sleeves plastic/transparent insert folders for each classroom teacher. This resource allows a teacher to place *two (2) – one hundred (100) word lists* back-to-back in each dry sleeves folder to facilitate efficiency when assessing students.**

4.) **The teacher should set-up a consistent time of the day to assess students. For the primary grades (kindergarten through 2nd grade), an efficient means to accomplish weekly testing is to divide the class into 4 or 5 groups. For example, if there are twenty (20) students in a typical classroom,**

the teacher can divide a class into five (5) groups (i.e. a Monday Group, a Tuesday Group, a Wednesday Group, etc.) of four (4) children each. Any experienced-level teacher can easily manage to assess four (4) children each day on the group's 'testing' day. Tip: If there is a Monday Group, place highly reliable or the highest academic students in that group due to the two-day weekend break. Finally, the teacher should remind each group of children at dismissal the day before that his or her assessment is the following day/tomorrow.

5.) **For primary-aged elementary students and immigrant (ELL) students, it is beneficial to globally review the *100 list of words,* so students are familiar with the correct oral pronunciation of each word. On the website provided in the footer of this document, there are free audio file downloads of all *ten (10) – 100 word lists*. *These digital files are designed so each word is simultaneously visually displayed as it is verbally pronounced*. The word files may be used for a daily center rotation or if students have access to a home computer, the words may be copied to a one gig memory stick and students can practice at home. Tip: If a primary student has an older sibling, the teacher can enlist the older sibling to assist their younger brother or sister in nightly practice.**

6.) **When assessing students, it is recommended that a Xeroxed paper copy of the 'Monitoring XLS Spreadsheet' be marked to temporarily record the child's performance. The digital version of the spreadsheet may be updated at a convenient time and the document emailed to the campus administration each Friday afternoon. Template available for free download at the same website.**

7.) **When initially assessing students, it is NOT recommended to skip around the 100 word sheet. There are four (4) columns of twenty-five (25) words per column. It is recommended that the teacher proceed vertically on the first column when assessing students. Initially, the teacher should NOT skip around. Students require consistent repetition to learn the high frequency words. The teacher should mark specific words on the student's fluency folder list that are mispronounced, so the child is aware to practice those specific words during independent practice. Additionally, before beginning the assessment, the teacher should quickly review each student's fluency folder to review any words with which the student previously demonstrated unfamiliarity. There are recommended Fall Semester fluency times – words per minute – to complete a list per grade level in the Stop-Gap Program directions of the downloaded document. These times are less stringent than the Spring Semester national fluency rates listed below in Table of National Oral Reading Fluency Norms. The fluency program implementation during the fall semester presses formative readiness for the core curriculum at that point in the school year. However, with effective and accountable classroom lessons in balanced literacy, novel studies and independent reading throughout the school year, students become much more fluent readers by April and May. Adjust fluency times as needed for special student circumstances.**

8.) **If a student is making many errors on a word list assessment, it is recommended the classroom teacher parse the 100 word list into a column approach – 25 words at a time. The 'Monitoring XLS Spreadsheet' may be updated via a code to alert the administrator (i.e. P2 means Pink – 2nd column, whereas Pink is the color of sheet of the first 100 hundred words). The teacher may use twenty-five (25) word *cumulative* assessments (i.e. review previously completed columns each time the student is tested) until the student can complete the entire one hundred (100) word list.**

9.) **After a student completes a one-hundred (100) word list, the teacher should randomly 'spot-check' the student to ensure he or she knows the words regardless of the order of the words on the 100 word list. It is recommended that the teacher reverse the vertical order on the columns as they 'quiz or spot-check' students, and the teacher should randomly ask a student to pronounce words selected anywhere on the word list. If the student cannot correctly pronounce words that are randomly selected, then it implies the student does-NOT know the words. The**

teacher should begin the word list afresh and ensure the student can recite the list in either word column direction during the fluency assessments. Note: The student MUST know the words correctly to pass the assessment in a specified amount of time.

10.) TEACHER TIPS to facilitate ease of Implementation of the Fluency Program are listed below.

a.) Train a parent volunteer(s) to assist in assessing students each week. It is highly recommended that the teacher be specific in their training to ensure quality controls of student assessments, and that the parent(s) is reliable to consistently show-up at the designated class time. An official criminal background check of any volunteer should be conducted in compliance with State, school or district policies to ensure student safety at all times. TIP: Assessing a student group first thing in the morning while the other students complete an independent activity is a highly efficient and effective classroom routine.

b.) For students that rapidly reach the 6th and 7th hundred (100) word list levels, the teacher should focus and press those students to complete the 1,000 Fluency Word Program in its entirety as quickly as possible. Then, there will be more time to focus on the remaining students, and there are not as many students to track and schedule assessments each week.

c.) For students in the fourth (4th) through sixth (6th) grades, the teacher can check their standardized test scores from the previous school year. In this situation, if the student scored a seventy-five (75%) or higher on a *timed* State reading assessment, then that student may not need to complete the fluency program for they have proven they are a fluent reader under test conditions in the prior grade. However, if the student was tested in a non-English language, that student should complete the fluency program to ensure that a student classified as an English Language Learner (ELL) is fluent and proficient in English.

d.) Celebrate student successes with recognitions! When a student finishes his or her hundred word list in kindergarten, first or second grade, acknowledge student accomplishments with stickers, buttons and school assemblies. Students need to know their efforts are recognized.

Reading fluency directly impacts a child's ability to comprehend the implicit and explicit meaning in a novel or reading passage. Furthermore, the student's reading prowess dramatically influences a child's affinity for literature. It is a paramount factor in a child's educational success throughout both elementary and secondary school.

For this reason, an elementary classroom teacher should be familiar with the national fluency levels to compare his or her students' reading fluency to nationally accepted standards. After comparing fluency rates, the Title 1 classroom teacher is cognizant of any literacy inequities in his or her classroom. If appreciable differences exist between their students and national norms, educators can reestablish goals to improve reading fluency in their classrooms. In a word, a classroom teacher can implement the literacy stop-gap programs in their classroom at precisely the focused level of reading fluency rates to improve his or her students reading ability. Table 1 below provides the National Oral Reading Fluency Norms - Hasbrouck & Tindal (2006).

As students transition into functional independent readers, it is highly recommended that teachers utilize these basic word programs and heightened vocabulary word programs to introduce students to reading prosody via shared reading or novel studies. In doing so, students are exposed to an author's use of timing, phrasing, emphasis, and intonation to convey aspects of meaning as well as to make a character's speech lively. With sufficient and pedagogical exposure, students often learn to incorporate these literacy elements in their own writing and silent reading.

The literacy stop-gap implementation procedures will greatly assist children to rapidly accelerate to grade level reading and writing curriculum. The stop-gap literacy resources rectify the academic skill word gaps and foment the selected core curriculum to function as a grade level curricular resource, as it was designed and intended. However, it is important to note that highly efficient daily classroom routines, effective classroom management, balanced reading elements, novel studies, vocabulary development and independent reading with accountability are essential to press and heighten a child's academic performance.

Table of National Oral Reading Fluency Norms

Grade	Percentile	Fall**	Winter**	Spring**	Grade	Percentile	Fall**	Winter**	Spring**
1	90		81	111	5	90	166	182	194
	75		47	82		75	139	156	168
	50		23	53		50	110	127	139
2	90	106	125	142	6	90	177	195	204
	75	79	100	117		75	153	167	177
	50	51	72	89		50	127	140	150
3	90	128	146	162	7	90	180	192	202
	75	99	120	137		75	156	165	177
	50	71	92	107		50	128	136	150
4	90	145	166	180	8	90	185	199	199
	75	119	139	152		75	161	173	177
	50	94	112	123		50	133	146	151

**** WCPM = Words Correct Per Minute**

Numeracy Stop-Gap Resources

Numeracy Stop-Gap Resources – Description, Understanding and Design

Numerical fluency is similar to reading fluency. Both are the building blocks of student success in reading or mathematics. As is widely known, reading fluency – being able to decode words – impacts reading comprehension. Many language arts teachers have observed students with poor phonetic decoding and sight word recognition skills read so slowly that many times they are unable to understand the very sentence they just read.

Poor numerical fluency has the same negative effect in mathematics. Numerical fluency is the ability to work fluidly with numbers in a variety of mathematical situations. When a child's numerical ability is lacking, they struggle to solve multi-step math problems. Students that are competent and proficient in numeracy possess the ability to hold a multi-part problem in their working memory, use their math skills to resolve each part and solve the problem as a whole. The goal of modern day math classrooms is to equip students to solve everyday math problems. There are many successful approaches to developing problem solving skills. But without a foundation of numeracy, students will not be able to reach their full problem-solving potential. Good problem solving is universally dependent on students' possessing core numeracy skills.

Numeracy skill gaps are relatively easy to identify, but the empirical reality in a modern day Title 1 classroom is implementing an efficient schoolwide system that directly addresses the wide range of students' individualized math fact and math skill gaps. The second systematically problematic factor is verifying student mastery of the numeracy skill as well as providing an intervention vehicle to ensure the student's academic skill gap was successfully addressed. Lastly, as with the literacy stop-gap programs, the numeracy program must also be equally viable and independent of any selected core curriculum or grade level math standards (e.g. Common Core State Standards – CCSS or the Texas Essential Knowledge and Skills – TEKS).

From a pragmatic perspective, a differentiated numeracy program must address the four (4) basic operational math facts (e.g. addition, subtraction, multiplication and division) as well as the math process skills (e.g. place value, rounding, computational skills, perimeter, etc.). When a daily differentiated numeracy program and the spaced repetition system (SRS) are used in combination, both instructional systems directly impact students' numeracy skills. This symbiotic relationship between these two (2) daily 90-minute math block components is expatiated in great detail in the companion white papers, "Accelerated Math Fact Student Mastery" and "Spaced Repetition System (SRS) – Application: General Math Skill Mastery." Again, all white papers may be immediately downloaded for free at the website address provided in this paper's footer.

As shown in Figure 2, 'Title 1 Academic Transformation using Stop-Gap Resources,' the numeracy stop-gap resource has the same singular objective as the literacy stop-gap resources, but it rectifies math skill numeracy gaps. A daily numeracy program plays an essential role in academic Title 1 school turnaround. Since a high percentage of Title 1 elementary and middle school aged students have NOT mastered prior grade level math skills, a global daily numeracy program is needed that efficiently and effectively addresses and closes students' mathematic skill gaps. A numeracy program not only academically accelerates struggling students to grade level, but the individualization aspect of the program presses and challenges on-grade level and gifted students beyond current grade level math standards.

The two elementary schools illustrated in the white concept paper, "Accelerated Student Achievement in American Title 1 Elementary Schools," illustrate tremendous academic performance in all subjects tested. A primary reason for these levels of results is the rigorous pressing of a differentiated daily numeracy program. Generally, since mathematics is a more rapid academic turnaround in elementary school than literacy, it affords school personnel more time to focus on reading, writing and science. By the time a student completes the third (3^{rd}) grade, their math facts and math processing skills should be soundly on grade level. As those students' transition to fourth (4^{th}) and fifth (5^{th}) grades, most state agencies require standalone standardized assessments in writing and science. However, if students are on grade level in mathematics, teachers focus less of their instructional day on mathematics and more time on other core subjects. Otherwise, fourth and fifth grade teachers must divide their instructional time between three (3) core subjects instead of only two (2), since students are grade level ready in mathematics.

Numeracy Stop-Gap Resources – Pragmatic Implementation

The preponderance of individual student numeracy skill gaps on each grade level creates an arduous daily organizational task for any classroom teacher. Fortunately, the differentiation, sequencing, tracking, monitoring and organization no longer needs to be an endemic classroom or schoolwide issue. The Formative Loop Numeracy Program (Grades 1 through 8) is an individualized, differentiated numeracy program that utilizes a five (5) minute paper-pencil assessment with a digital tracking, monitoring and numeracy skill distribution system for ***both*** math fact and math processing skills. Formative Loop offers different combinations of longitudinal numeracy streaming for grades 1 through 8. It affords students the daily opportunity to practice a math fact and/or a math processing skill with paper and a pencil. This learning modality takes into account two of the three aspects of rudimentary learning: thinking and writing. It also provides an immediate and recognizable intervention process to occur, as needed, in the event a student exhibits a skill deficiency or misconception. With the implementation of an effective differentiated numeracy program, spaced repetition methodology and pragmatic Bridge Resources, teachers are provided a more forgiving instructional math block. Students are more apt to make number sense connections and establish a strong numeracy foundation to ensure more successful core math lessons each instructional day.

The power of the Formative Loop Numeracy Program is that it offers all the same general attributes of a stop-gap resource listed on pages 5 and 6 above. It is also a blended paper-pencil, digital tracking and monitoring system that allows the differentiated program to be effectively and efficiently implemented school-wide in all classrooms. The numeracy program is essential in the academic turnaround of elementary schools since the child's prior numeracy gaps are rectified and the program provides mastery verification of current grade level math skills. Unlike the stop-gap literacy resources that are free downloads, the numeracy program has a nominal cost per student. The pragmatic numeracy implementation steps are listed below.

Stop-Gap Numeracy Resource: Pragmatic Implementation Steps

Differentiated Formative Loop Daily Numeracy Program

1.) ***After contacting Formative Loop:*** Watch set-up videos and read implementation recommendations. Enter teacher/student names, link computers used for inputting to a printer or copier to sequentially print homework and five (5) minute daily numeracy assessments.

2.) ***Decide who grades and inputs the five (5) minute daily numeracy assessments:*** Classroom Teachers or Outside Classroom Support Personnel or combination of campus personnel.

3.) ***Determine who conducts student interventions, as needed:*** Classroom Teachers or Support Personnel – or possibly a combination of the two faculty groups.

4.) ***Set-up schoolwide and classroom systems:*** Distribution of daily assessments; active monitoring during the classroom's daily five (5) minute assessments; Digitally monitoring individual student and adjacent classroom progress via Formative Loop student data and digital reports; Pressing and encouraging students to succeed; and, Recognizing student accomplishments – math fact driver license incentive (free template downloads for all US States) or an alternative incentive program!

5.) ***Incorporate a Spaced Repetition System (SRS) in 2nd grade through 6th grade classrooms:*** Recommend reading white papers on the 90 Minute Math Block – Putting all the Pieces Together, Spaced Repetition (Instruction) Systems (SRS) – implement symbiotic instructional system to heighten student academic performance and both math fact mastery documents. All papers are free and downloads available on the website address in the footer of this document.

Bridge Resources

Bridge Resources – Description, Understanding and Design

As shown in Figure 1, 'School Managerial Reformation Schematic,' Instructional Resources (Curricular) are divided into three separate categories: Stop-Gap Resources, Core Curriculum and Bridge Resources. As noted, a school or district may select any core daily curriculum resource. The core curriculum is based on grade-level state standards and assumes all students possess the layered prerequisite skills to successfully engage in daily classroom lessons. However, as stated, this is not the empirical reality of the vast majority of American Title 1 public school classrooms and invites the educational need for the other two listed curricular instructional resources (e.g. Stop-Gap and Bridge). Both of these curricular resources dramatically affect student achievement outcomes in both non-Title 1 and Title 1 elementary schools.

As discussed, stop-gap resources remedy academic skill gaps regardless of the geographical location or the school's socioeconomic status. The stop-gap curricular numeracy and literacy resources are designed with basic structure and low complexity, thus eliminating poor implementation due to an educator's lack of classroom experience. The objective of stop-gap resources is to rapidly accelerate students to grade level by focusing on rectifying specific numeracy and literacy skill gaps common with relatively large numbers of Title 1 students or economically disadvantaged students in a non-Title 1 school. However, the pedagogical effect of these resources is dramatic as Title 1 elementary students in both primary and intermediate grades are able to actively engage in grade-level daily lessons; thus, avoiding continual differentiation for struggling students and affording the classroom teacher more global efficiency and effectiveness in their daily instruction and lesson design.

Bridge Resources also possess a singular academic design benefit and pragmatic objective in core subjects in both Title 1 and non-Title 1 classrooms. Bridge Resources apply grade level reading, writing, mathematics and science skills and standards in a real world or situational problem. For instance, a typical

Bridge Resource problem is a math word problem that requires fourth (4^{th}) grade students to compute the area of a rectangular garden given the garden's perimeter and only one known side or dimension (i.e. length or width). The student must use discrete addition and subtraction skills to compute the parallelogram's missing length or width, and then use multiplication of the two dimensions – the length and width – to compute the garden's area. In this case, a student computes the parallelogram's area by connecting discrete math skills in a logical and sequential process, piece by piece, as if forming a 'bridge' of myriad math skills to solve the word problem. Highly effective grade level Bridge Resources afford the classroom teacher with a daily curricular tool that provides grade level rigor and student learning expectations as specified with either the Common Core or the Texas Essential Knowledge and Skills (TEKS) reading, writing, science and math standards. Hence, students are adequately prepared and exposed to the grade level rigor and the problem solving expectation in each core subject. It is important to note that a Bridge Resource used in the classroom during the fall may look different than a Bridge Resource implemented in the spring. A high quality Bridge Resource in the fall includes specific skill building practice in conjunction with skill application problems, because students are building both application and discrete skills in the fall. Yet in the spring, the resource is more solely focused on application problems.

General Attributes of Bridge Resources

As with Stop-Gap Resources, Bridge Resources are an additional curricular implementation at an elementary campus; therefore, a thorough understanding of the resource ensures fidelity of pragmatic implementation. It is highly recommended that the dynamics of Bridge Resources be carefully studied and investigated with regard to skill and application sequencing prior to schoolwide implementation.

1.) Bridge Resources **do not** replace any aspect of a school's core curriculum. Similar to stop-gap resources, Bridge Resources are implemented in addition to the adopted core curriculum.

2.) Bridge Resources are generally designed for use in writing, reading, mathematics and science for both the fall and spring semesters.

3.) They are **grade level resources** intended for classroom implementation with students enrolled in that grade – meaning Bridge Resources emphasize current grade level standards and student learning expectations for each core subject.

4.) Common Core (CC) and Texas Essential Knowledge and Skills (TEKS) core standards specify student learning objectives. However, the interpretation of any state standard, and its assessment in an application setting is highly subjective. Consequently, a Bridge Resource often evaluates the manner in which education agencies and their assessment representatives analyze and interpret a grade level Standard in application form, and the Bridge Resource emulates those problem types in a general, but similar fashion.

5.) For all practical purposes, the Texas standardized STAAR (State of Texas Assessment of Academic Readiness) assessment or standardized testing in California, New York, Massachusetts or any other US State contains application questions based on their State Education Agency Common Core Standards for each grade level. Consequently, a spring daily Bridge Resource used in a core subject is a specific curricular resource that teachers use with their students for formatting exposure, grade level rigor and as a diagnostic tool.

6.) Bridge Resources are used in both the fall and spring semesters. A fall Bridge Resource also includes application problems of current grade level standards, but it often includes the development of specific skills as is seen in Figure 4 below. A spring Bridge Resource – examples shown in Figure 5 and Figure 6 – is often much more focused on mirroring state standard application problems to expose students to both formatting and typical grade level rigor expectations of an upcoming state assessment.

7.) Bridge Resources may be purchased from many reputable vendors. However, the 5^{th} (fifth) science *spring* Bridge Resource shown in Figure 7 is an example of a campus or teacher produced resource.

A major advantage of producing this type of resource in-house is control of the curriculum sequencing and specificity of the formatting to a campus' academic needs. Another advantage is the control factor in rapidly updating the resource to changing state standards or internal pedagogical demands. The disadvantages of creating these resources in-house is the time and expertise required to create high quality written exercises and problems. The Standards must be carefully studied and deconstructed, but not in the manner of the author's perception or understanding of a selected student expectation. In creating an effective **spring** Bridge Resource, the key point is determining the state's education agency deconstruction in conjunction with the state's student expectation for each specific Standard.

8.) A Bridge Resource may be used as a diagnostic tool in either the fall or spring. During the monitoring and daily assessment, the classroom teacher readily observes what concepts were taught and clearly mastered and other specific concepts that may require additional student practice. The teacher may opt to include those learning concepts in a specific review using a spaced repetition instructional system or additional homework. Regardless of the pedagogical practicing vehicle, a teacher's diagnostic use of a Bridge Resource is an invaluable formative assessment tool to identify specific content requiring additional student review.

9.) Commercially purchased Bridge Resources, most notably **fall** semester Bridge Resources, do not always follow either the adopted core curriculum or the classroom teacher's content sequencing. As stated, the fall resource is intended to provide application and additional skill practice of grade level core standards. However, a quality fall semester Bridge Resource can also create a fundamental foundation in discrete skills in numeracy, writing or science content. Again, the issues with vendor **fall** Bridge Resources is often the misalignment of content sequencing with that of the classroom. By the spring, a majority of the grade level content has been taught, and the spring resource assists students in both student expectations of skill preparedness and formatting of the upcoming state assessment. Hence, the sequencing of the Bridge Resource is not as problematic.

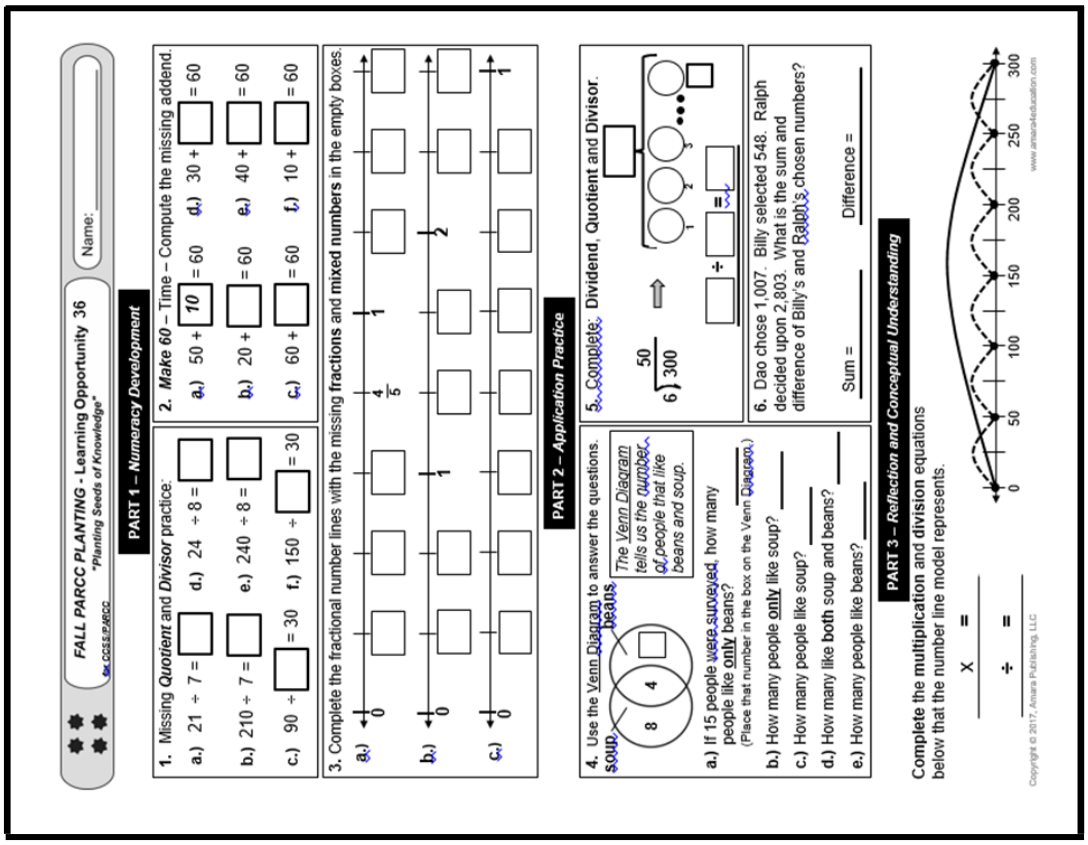
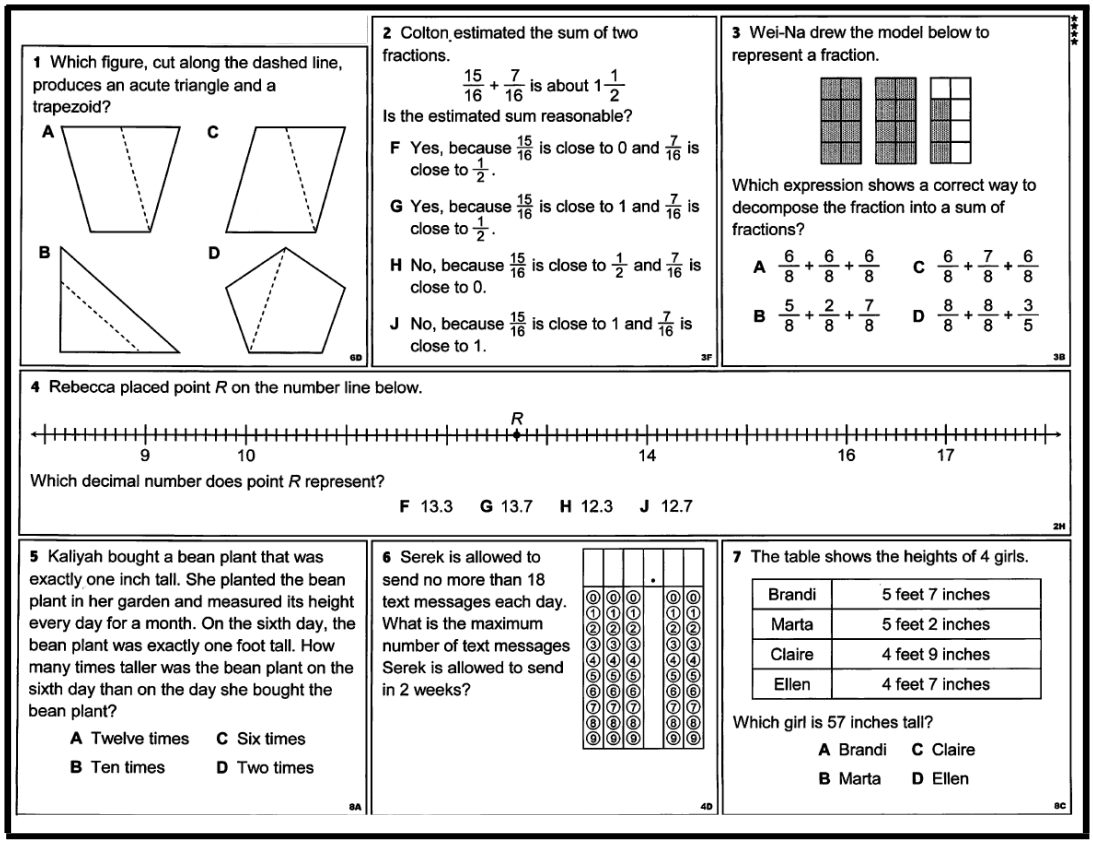


Figure 4 – 4th Grade Math Bridge Resource Fall Semester Example



1 Which figure, cut along the dashed line, produces an acute triangle and a trapezoid?

A C

B D

6D

2 Colton estimated the sum of two fractions.

$\frac{15}{16} + \frac{7}{16}$ is about $1\frac{1}{2}$

Is the estimated sum reasonable?

F Yes, because $\frac{15}{16}$ is close to 0 and $\frac{7}{16}$ is close to $\frac{1}{2}$.

G Yes, because $\frac{15}{16}$ is close to 1 and $\frac{7}{16}$ is close to $\frac{1}{2}$.

H No, because $\frac{15}{16}$ is close to $\frac{1}{2}$ and $\frac{7}{16}$ is close to 0.

J No, because $\frac{15}{16}$ is close to 1 and $\frac{7}{16}$ is close to 1.

3F

3 Wei-Na drew the model below to represent a fraction.

Which expression shows a correct way to decompose the fraction into a sum of fractions?

A $\frac{6}{8} + \frac{6}{8} + \frac{6}{8}$ **C** $\frac{6}{8} + \frac{7}{8} + \frac{6}{8}$

B $\frac{5}{8} + \frac{2}{8} + \frac{7}{8}$ **D** $\frac{8}{8} + \frac{8}{8} + \frac{3}{5}$

3B

4 Rebecca placed point *R* on the number line below.

9 10 *R* 14 16 17

Which decimal number does point *R* represent?

F 13.3 **G** 13.7 **H** 12.3 **J** 12.7

2H

5 Kaliyah bought a bean plant that was exactly one inch tall. She planted the bean plant in her garden and measured its height every day for a month. On the sixth day, the bean plant was exactly one foot tall. How many times taller was the bean plant on the sixth day than on the day she bought the bean plant?

A Twelve times **C** Six times

B Ten times **D** Two times

8A

6 Serek is allowed to send no more than 18 text messages each day. What is the maximum number of text messages Serek is allowed to send in 2 weeks?

4D

7 The table shows the heights of 4 girls.

Brandi	5 feet 7 inches
Marta	5 feet 2 inches
Claire	4 feet 9 inches
Ellen	4 feet 7 inches

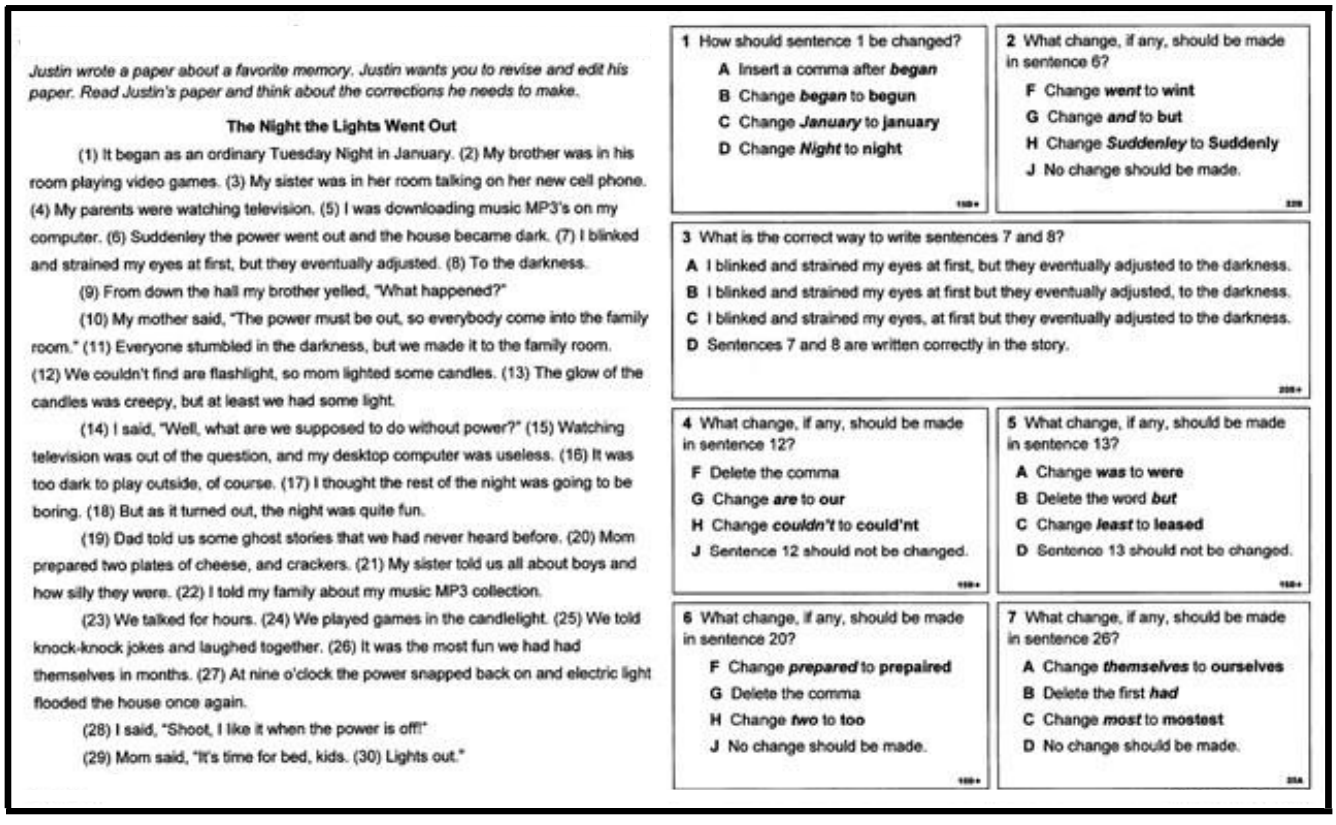
Which girl is 57 inches tall?

A Brandi **C** Claire

B Marta **D** Ellen

8C

Figure 5 – 4th Grade Math Bridge Resource Spring Semester Example



Justin wrote a paper about a favorite memory. Justin wants you to revise and edit his paper. Read Justin's paper and think about the corrections he needs to make.

The Night the Lights Went Out

(1) It began as an ordinary Tuesday Night in January. (2) My brother was in his room playing video games. (3) My sister was in her room talking on her new cell phone. (4) My parents were watching television. (5) I was downloading music MP3's on my computer. (6) Suddenley the power went out and the house became dark. (7) I blinked and strained my eyes at first, but they eventually adjusted. (8) To the darkness.

(9) From down the hall my brother yelled, "What happened?"

(10) My mother said, "The power must be out, so everybody come into the family room." (11) Everyone stumbled in the darkness, but we made it to the family room. (12) We couldn't find are flashlight, so mom lighted some candles. (13) The glow of the candles was creepy, but at least we had some light.

(14) I said, "Well, what are we supposed to do without power?" (15) Watching television was out of the question, and my desktop computer was useless. (16) It was too dark to play outside, of course. (17) I thought the rest of the night was going to be boring. (18) But as it turned out, the night was quite fun.

(19) Dad told us some ghost stories that we had never heard before. (20) Mom prepared two plates of cheese, and crackers. (21) My sister told us all about boys and how silly they were. (22) I told my family about my music MP3 collection.

(23) We talked for hours. (24) We played games in the candlelight. (25) We told knock-knock jokes and laughed together. (26) It was the most fun we had had themselves in months. (27) At nine o'clock the power snapped back on and electric light flooded the house once again.

(28) I said, "Shoot, I like it when the power is off!"

(29) Mom said, "It's time for bed, kids. (30) Lights out."

1 How should sentence 1 be changed?

A Insert a comma after ***began***

B Change ***began*** to **begun**

C Change ***January*** to **january**

D Change ***Night*** to **night**

2 What change, if any, should be made in sentence 6?

F Change ***went*** to **wint**

G Change ***and*** to **but**

H Change ***Suddenley*** to **Suddenly**

J No change should be made.

3 What is the correct way to write sentences 7 and 8?

A I blinked and strained my eyes at first, but they eventually adjusted to the darkness.

B I blinked and strained my eyes at first but they eventually adjusted, to the darkness.

C I blinked and strained my eyes, at first but they eventually adjusted to the darkness.

D Sentences 7 and 8 are written correctly in the story.

4 What change, if any, should be made in sentence 12?

F Delete the comma

G Change ***are*** to **our**

H Change ***couldn't*** to **could'nt**

J Sentence 12 should not be changed.

5 What change, if any, should be made in sentence 13?

A Change **was** to **were**

B Delete the word ***but***

C Change ***least*** to **leased**

D Sentence 13 should not be changed.

6 What change, if any, should be made in sentence 20?

F Change ***prepared*** to **prepaired**

G Delete the comma

H Change ***two*** to **too**

J No change should be made.

7 What change, if any, should be made in sentence 26?

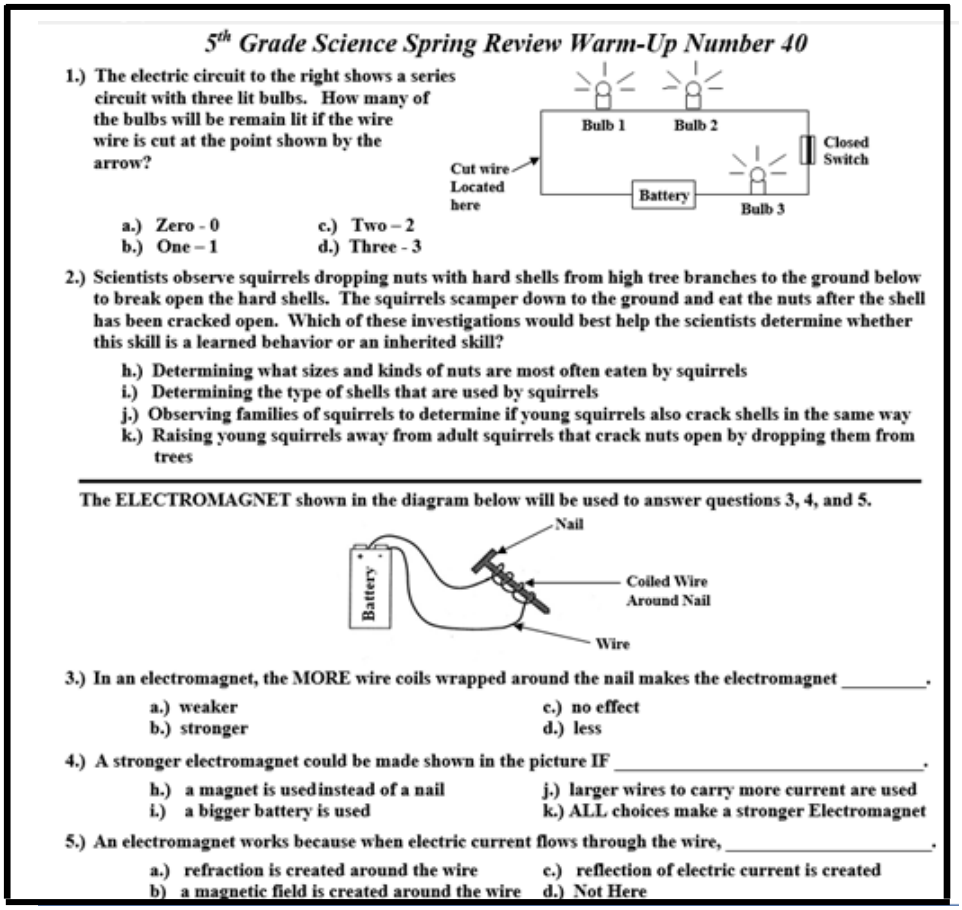
A Change ***themselves*** to **ourselves**

B Delete the first ***had***

C Change ***most*** to **mostest**

D No change should be made.

Figure 6 – 4th Grade Writing Bridge Resource Spring Semester Example



5th Grade Science Spring Review Warm-Up Number 40

1.) The electric circuit to the right shows a series circuit with three lit bulbs. How many of the bulbs will be remain lit if the wire wire is cut at the point shown by the arrow?

a.) Zero - 0
b.) One – 1
c.) Two – 2
d.) Three - 3

2.) Scientists observe squirrels dropping nuts with hard shells from high tree branches to the ground below to break open the hard shells. The squirrels scamper down to the ground and eat the nuts after the shell has been cracked open. Which of these investigations would best help the scientists determine whether this skill is a learned behavior or an inherited skill?

h.) Determining what sizes and kinds of nuts are most often eaten by squirrels
i.) Determining the type of shells that are used by squirrels
j.) Observing families of squirrels to determine if young squirrels also crack shells in the same way
k.) Raising young squirrels away from adult squirrels that crack nuts open by dropping them from trees

The ELECTROMAGNET shown in the diagram below will be used to answer questions 3, 4, and 5.

3.) In an electromagnet, the MORE wire coils wrapped around the nail makes the electromagnet _____.

a.) weaker
b.) stronger
c.) no effect
d.) less

4.) A stronger electromagnet could be made shown in the picture IF _____.

h.) a magnet is usedinstead of a nail
i.) a bigger battery is used
j.) larger wires to carry more current are used
k.) ALL choices make a stronger Electromagnet

5.) An electromagnet works because when electric current flows through the wire, _____.

a.) refraction is created around the wire
b) a magnetic field is created around the wire
c.) reflection of electric current is created
d.) Not Here

Figure 7 – 5th Grade Science Bridge Resource Spring Semester Example

Bridge Resources – Pragmatic Implementation

As with all curricular resources, the fidelity in the pragmatic implementation of Bridge Resources is key to their effectiveness and success. Classroom teachers **require** training on consistency, interventions, monitoring and student accountability to standardize the instructional aspect of the resource. The school's administration cannot simply purchase and distribute this resource tool to classroom teachers expecting the academic results to dramatically increase. Both campus administration and the teaching faculty must collaboratively work together to ensure heightened student academic outcomes are achieved. The implementation recommendations listed below are provided with that principal objective.

Bridge Resources: Pragmatic Implementation Steps

1.) Campus personnel must decide if the campus should purchase a Bridge Resource from a vendor or create the resource in-house. If purchased from a vendor, the vendor product should match the quality of the resource shown in Figures 4, 5 and 6. If the resource is created in-house, then its general sequencing, format and style should be thoroughly considered prior to initiating the writing process. The authors of the in-house resource should be accomplished classroom teachers with a history of high student achievement in their classrooms. The resource for the fall semester should include grade level, standard-based application problems as well as discrete math, science or writing skills that are essential for skill development. Finally, a standard 'daily sheet' template should be developed for the final product to achieve a uniform, professional appearance.

Bridge Resources: Pragmatic Implementation Steps

2.) **If a <u>fall</u> semester Bridge Resource is commercially purchased from a vendor, there are several steps that should be analyzed and considered prior to implementation. The general sequencing should be examined. If the Bridge Resource presents the core content material in a sequencing that differs from the sequencing of classroom instruction, the teacher has several options:**

   a.) **The teacher can skip those non-sequential problems and revisit after they have taught that curricular content.**

   b.) **The teacher can work the problem with the students – guiding the students. Then, the teacher can provide similar problems on subsequent days using spaced repetition instruction, but the teacher must change the numbers or data in the problem.**

   c.) **The teacher can use a razor blade knife and remove only those non-sequenced problems from the Bridge Resource. Then, the teacher can write and insert their own word problem(s) that align with their own classroom instruction and sequencing. It is recommended the teacher use the extracted or removed skills and problems and reinsert them in a future page of the Bridge Resource when their daily instruction aligns with that skill or problem type. Finally, the classroom teacher should create a complete and final modified copy of the Bridge Resource (modified) for use in subsequent school years.**

3.) **It is highly recommended that each student possess his or her own <u>*spirally bound copy*</u> of the Bridge Resource. The front and back covers of the student copy should be 60 to 65 bond weight paper for durability reasons. If each student possesses their own copy, a teacher is not required to make copies each week and there is a time-saving efficiency aspect of using the program in daily classroom routines. Finally, a bound copy provides the campus educators with a running record of program use, and it is often less expensive to use a local printing service or a school district Xerox service than to use a school copier for individually printing sheets.**

4.) **The classroom teacher should thoroughly <u>model</u> the problem solving process. It is recommended that a teacher model for his or her students for at least three (3) to four (4) class days, so students completely understand the expectations for their work. The Bridge Resource should be used every day as part of the daily instructional schedule. Consistency and accountability are major keys to heightened student outcomes!**

5.) **It is recommended that the classroom teachers create an answer key prior to checking student work, so they are familiar with the correct solutions and the degree of student work that must be shown to arrive at a correct solution or response.**

6.) **Student work should be monitored and checked every day. It is recommended that the teacher check students' work for completeness and accuracy in real time. For example, using a Bridge Resource for 3rd through 6th graders in mathematics in the spring, the teacher checks each student's work individually as they complete each problem, ensuring quality work using a structured problem solving approach. This labor intensive process possesses several important pedagogical advantages:**

   a.) **Although this process expends as much as 30 to 40 minutes of class time at the on-set, the monitoring and checking process quickens to 15 to 20 minutes within a couple weeks. But, the teacher is assured of quality student work and conceptual and computational mastery. Since each student is working individually, student privacy folders should be used to ensure there is not an unintended <u>collective</u> effort from one or more students to complete the daily exercise. Finally, for a problem to be considered correct, a student must show**

Bridge Resources: Pragmatic Implementation Steps

all work in solving the problem (e.g. no mental math) and the correct methodology.

b.) The teacher can group students in the classroom that struggle, so they are in close proximity of one another so he or she can assist several students concurrently with the same problem type. The teacher must have clear expectations for early finishers – quietly reading independently, for example, so other students are not distracted.

c.) The teacher is immediately cognizant of any problems or skills that are difficult for students and is able to provide more practice and/or intervention

d.) It is recommended that the teacher place an 'anchor of support' in clear view of all students that clearly illustrates the accepted problem solving methodology and student expectations for quality work. This wall placard should include a pristine sample of student work from the Bridge Resource to be used as an immediate reference to any students whose completed work is not to the quality of the teacher's directions or expectations.

7.) A standard problem solving methodology for each core subject should be taught and students held accountable for each Bridge Resource. Of course, the <u>teacher can use any system</u> that is both efficient and effective. An acronym is useful for students to write on the page of the Bridge Resource to remind them and ingrain the process, so all students are held accountable for learning grade level standards. Examples of reading, writing, mathematics and science acronyms are shown below.

a.) <u>Reading</u> Comprehension Passage: TQRAP – 'T' means to examine the passage's <u>T</u>itle and <u>T</u>ext features to infer meaning of the passage; 'Q' is for previewing the passage <u>Q</u>uestions; 'R' stands for <u>R</u>eading the passage; 'A' means <u>A</u>nswering the questions, and 'P' is for locating and providing <u>P</u>roof from the passage justifying selected answer.

c.) <u>Writing</u>: CUPS – 'C' means the student checks each sentence for words that should be <u>C</u>apitalized; 'U' stands for <u>U</u>sage errors in the sentences; 'P' is checking for <u>P</u>unctuation errors, and 'S' requires the student to check for the correct <u>S</u>pelling of all words in the sentence(s).

d.) <u>Math</u>: RACE – 'R' means the student should <u>R</u>ead the problem and underline the last sentence of the problem that indicates what the problem is asking the student to determine. 'A' implies that student should circle <u>A</u>ll relevant data (numbers and words) and cross out extraneous information. 'C' stands for showing the <u>C</u>omputations needed to solve the problem – neatly and logically displayed. 'E' means for the student to <u>E</u>valuate the problem and check their work as well as the reasonableness of his or her solution.

e.) <u>Science</u>: CRUGWIE – 'C' tells the student to <u>C</u>over the multiple choices answers; 'R' means <u>R</u>ead the question twice; 'U' stands for <u>U</u>nderline the important information; 'G' communicates to the student to <u>G</u>o to their science schema; 'W' means the student should <u>W</u>rite their own answer to the question; 'I' reminds the student, '<u>I</u>s there a multiple choice match to your answer?" Finally, 'E' tells students to <u>E</u>xplain all wrong answers or why alternative multiple choice answers are incorrect.

8.) <u>Final Note:</u> If fundamental academic skill gaps are not rectified, a Bridge Resource will lack both effectiveness and efficiency. Hence, the stop-gap resource programs in both literacy and numeracy must be implemented and pressed to accelerate students to grade level academics. The Bridge Resource is a grade level standards curricular resource tool. It is designed and intended to assess grade level competency, not fill prior year academic skill gaps.

CONCLUSION AND FINAL COMMENTARY

Operationally and instructionally, all elementary schools can be discretely parsed into the following three (3) separate areas: systems, resources and personnel. This document exclusively focused and expatiated upon the curricular resources aspect of elementary schools. It is also a companion white paper to the overarching school reformation document entitled, "Accelerated Student Achievement in American Title 1 Elementary Schools." Since the curricular resources are unique and pivotal aspects of this academic turnaround model, this paper's main intent was to greatly expand upon the primary concept paper and provide highly specific resource attributes and design information as well as pragmatic implementation procedures for interested education stakeholders.

Academic literacy and numeracy skill gaps are the common impediment preventing education equity in this country. The infamous achievement gap will **not** be narrowed or closed without rectifying students' academic literacy and numeracy skill gaps – regardless of the geographical location of the Title 1 elementary school. In an existential Title 1 reality, the achievement gap is nothing more than an annual measuring of these academic skill gaps between children of poverty and their more affluent peers. If urban and rural Title 1 elementary school personnel continually refuse to directly address their students' fundamental literacy and numeracy skill gaps, academic and economic inequity will continue in the public school system, school year after school year. Allocating more money and casting blame on impoverished conditions or focusing on other external school elements will not resolve educational inequity in our nation's schools. However, pragmatic and accountable implementation of the curricular resource methodology outlined in this document that ***directly addresses*** children of poverty's literacy and numeracy skill gaps will accomplish that objective. This academic reformation model significantly narrows and often closes the achievement gap as was accomplished at Graham, Blackshear and Becker Elementary Schools in Austin ISD.

It is the author's professional experience and opinion that many school reformers focus their attention exclusively on school personnel when addressing academic Title 1 School turnaround. This approach will neither sustain nor appreciably affect a Title 1 School's academic plight. The personnel exception to this situation is the selection of the school's principal. The campus principal possesses singular control or has tremendous influence in all aspects of the school's physical plant condition and maintenance, schoolwide and classroom systems and the school's pedagogical resources and their implementation. The lead campus administrator is also responsible for the hiring of all campus personnel and impacts instructional methodologies and classroom management expectations. Consequently, all three areas of school reform cited in these two white papers may have stakeholder support and buy-in by the faculty at a Title 1 elementary campus. However, if the campus administration is unwilling or unable to promote, organize, and closely monitor the academic and social reformation at the campus, it is highly improbable that the school will produce heightened student academic outcomes. To summarize, the principle of a Title 1 public school has an overarching impact on the students' social and academic outcomes. The Superintendent's selection of a lead Title 1 elementary campus administrator is of paramount importance. These two white papers provide a basic road map to realizing and maximizing at-risk student academic outcomes, but its success is attainable only if the school principal is willing and capable to foment and lead its implementation.

The power of the stop-gap curricular resource implementation approach has several key advantages. First, as elementary students are accelerated 'back' to grade level reading, writing and mathematics levels, the adopted core curriculum is viable for all students in the classroom. Second, the academic acceleration to grade level must occur rapidly: one school year in mathematics and between one to two school years in both reading and writing. Third, a classroom teacher of any experience level must be capable of effectively implementing the literacy and numeracy programs. Fourth, the diagram shown in Figure 2 – 'Title 1 Academic Transformation using Stop-Gap Literacy and Numeracy Resources' is a general diagram. It is not specific to a rural or urban or any geographical situation. ***Its command importance is that it represents a general solution*****.** The stop-gap numeracy and literacy resources embody a ***common solution to a common problem*** regardless of the Title 1 School's geographical location. Fifth, the stop-gap resources work independently of any state

education standards. Hence, they may be implemented with efficacy regardless of a specific state's literacy or math standard (i.e. either Common Core or the Texas Essential Elements and Knowledge). Sixth, the stop-gap programs are designed for simplicity in implementation allowing little to no training for on-boarding new personnel. Consequently, normal teacher turnover at the end of each school year does not strain administrative and instructional personnel resources in excessive new teacher training come August. Finally, the financial outlay is minimal – the literacy stop-gap resources are free and immediate program downloads. The numeracy stop-gap is a Formative Loop differentiated daily numeracy program that is a nominal price per student and extremely affordable for any elementary or middle school.

Bridge Resources are curricular resources that provide an application and grade level rigor for reading, writing, math and science, based on current grade level state agency standards. These resources may be commercially purchased or created in-house at a specific school or at the district level. However, the curricular resources are application-based and must closely align and mirror Common Core and TEKS grade level student expectations and learning intentions. Regardless of origin, the resources must be well written and implemented with high levels of student accountability. A careful review of the sections relating to Bridge Resources presented in this document may greatly assist any elementary school or district office in the analysis of a commercial purchase or in-house creation as well as the necessary steps to ensure fidelity of implementation.

Continued inaction and pedagogical and curricular resource misdirection has real life consequences for our children attending our traditional and charter public schools. Exorbitant annual financial allocations are given to the public education system without results, and with the myriad of woefully uneducated young adults entering the work force, the overall cost to the general economy is staggering. However, the adverse social, emotional and economic impact of educational inequity from the cradle to the grave for the mass of economically disadvantaged children enrolled in public schools is morally immeasurable. Effective and efficient systems and both stop-gap and bridge resources dramatically mitigate the singular problem that prevents educational equity for children of poverty – regardless of whether those children are enrolled in a low or a high socioeconomic elementary school.