RESULTS
THE KEY TO CONTINUOUS SCHOOL IMPROVEMENT

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Bessemer
Elementary School

Percentage of Students Meeting Standards

![Bar chart showing percentage of students meeting standards in reading and writing.]
Effective Teamwork
INDEPENDENCE                INTERDEPENDENCE

Storytelling And Scanning

Sharing

Aid and Assistance

Increasing demands for collective autonomy
And teacher-to-teacher initiative

Figure 1. A provisional continuum of collegial relations.

**Figure 11-1**

The Team Performance Curve

From:
*The Wisdom of Teams*
Katzenbach & Smith
I was doing a weekend seminar at the Deerhurst Lodge, north of Toronto. On Friday night a tornado swept through a town north of us call Barrie, killing dozens of people and doing millions of dollars worth of damage. Sunday night, as I was coming home, I stopped the car when I got to Barrie. I got out on the side of the highway and looked around. It was a mess. Everywhere I looked there were smashed houses and cars turned upside down.

That same night Bob Templeton was driving down the same highway. He stopped to look at the disaster just as I had, only his thoughts were different than my own. Bob was the vice-president of Telemedia Communications, which owns a string of radio stations in Ontario and Quebec. He thought there must be something we could do for these people with the radio stations they had.

The following night I was doing another seminar in Toronto. Bob Templeton and Bob Johnson another vice-president from Telemedia, came in and stood in the back of the room. They shared their conviction that there had to be something they could do for the people in Barrie. After the seminar we went back to Bob's office. He was now committed to the idea of helping the people who had been caught in the tornado.

The following Friday he called all the executives at Telemedia into his office. At the top of a flip chart he wrote three 3s. He said to his executives "How would you like to raise 3 million dollars 3 days from now in just 3 hours and give the money to the people in Barrie?" There was nothing but silence in the room.

Finally someone said, "Templeton, you're crazy. There is no way we could do that."

Bob said "Wait a minute. I didn't ask you if we could or even if we should. I just asked you if you'd like to."

They all said, "Sure, we'd like to. "He then drew a large T underneath the 333. On one side he wrote, "Why we can't." On the other side he wrote, "Why we can't" side. We're not going to spend any time on the ideas of why we can't. That's of no value. On the other side we're going to write down every idea that we can come up with on how we can. We're not going to leave the room until we figure it out." There was silence again.

Finally, someone said, "We could do a radio show across Canada."

Bob said, "That's a great idea," and wrote it down. Before he had it written, someone said, "You can't do a radio show across Canada. We don't have radio stations across Canada." That was a pretty valid objection.

They only had stations in Ontario and Quebec. Templeton replied, "That's why we can. That stays." But this was a really strong objection because radio stations are very competitive. They usually don't work together and to get them to do so would be virtually impossible according to the standard way of thinking.

All of a sudden someone suggested, "You could get Harvey Kirk and Lloyd Robertson, the biggest names in Canadian broadcasting, to anchor the show," (That would be like getting Tom Brokaw and Sam Donaldson to anchor the show. They are anchors on national TV. They are not going to go on radio.) At that point it was absolutely amazing how fast and furious the creative ideas began to flow.

That was on a Friday. The following Tuesday they had a radiothon. They had 50 radio stations all across the country that agreed to broadcast it. It didn't matter who got the credit as long as the people in Barrie got the money. Harvey Kirk and Lloyd Robertson anchored the show and they succeeded in raising 3 million dollars in 3 hours within 3 business days!

You see, you can do anything if you put your focus on how to do it rather than on why you can't.

Bob Proctor
Improvement Brainstorming Guidelines

The purpose of brainstorming is to produce as many good ideas or strategies as possible in a fast-paced, positive setting. It is often the first step in a focused, productive improvement meeting.

1. The purpose or desired result of the team meeting is clearly stated - preferably in writing.

2. A recorder writes down each idea on a flip chart, chalk board or whiteboard. If using a flipchart, post (rather than flip back) each page as it is completed.

3. Each person in the group, in consecutive order, has the opportunity to contribute one idea or strategy.

4. Each team member has the option to say "pass" when it is their turn to contribute.

5. Each person's remarks should be made as clearly and succinctly as possible - in 20 seconds or less.

6. There should be no criticism or discussion of ideas or strategies.

7. The recorder can seek clarification to ensure accurate recording of each idea or strategy.

8. Expect to "Piggyback" or build on each other's ideas: some of the best strategies are generated in this way.
Techniques for improving the quality of student introductions

(Anmphitheater High school English Department, Tucson, Arizona)

Provide Model Introductions

Have students write introductions last; (so that students know what they're introducing)

Teach the introduction as a separate piece of writing
  Focus on mapping-out entire paper first; then plan intro

Start with outline: thesis, main topics and paragraphs, then go back and build introductory paragraph around thesis statement

Stress "hooks" - provide models of these and of thesis statement (stress clarity of thesis statement)
  Cheryl will distribute a handout with which she does an exercise where she passes a variety of hook/thesis statements around room and asks students to evaluate these on the basis of their ability to grab and engage the reader

Free-write first, so that students can then go back and underline main ideas and then select what might belong in the introduction

Students write purpose of paper; then convert this into an attention-getting hook

Triangle mode/General to specific exercise: where students work with big ideas and sub-topics to get a sense of how to arrange these within the essay (see Larry Wurst-he may be distributing these to you)

Use pizza crust as a metaphor (The foundation on which the other elements go)

Write about the topic first to prime pump

Coach/model how to develop hooks

These emerge as good focus areas:
  - Provide, models: of hooks, intro paragraphs, thesis statements
  - Have students write intro last, or at least after they have done enough writing to have more precise sense of their thesis

FUTURE CHALLENGES: Student use of specific details, Support for topics/thesis; Transitions; Organization: Vocabulary/Diction.
Team Learning Log:

From Problems to Solutions
(reproduce as needed: team should submit copy to principal or project leader)

Identified instructional problem/opportunity
(e.g. "Compare and order decimals and factions" from Stanford 9, 5th grade)

Solution: That could have/has had an impact on student performance

Results: Measurable impact of solution.
Identified Instructional Problem/Opportunity:

"Estimate": from Stanford 9 report. It was the lowest-scoring area on our grade-level SAT 9 report.

SOLUTION: (generated in October)

First we consulted the SAT 9 Guide for Classroom Planning. Then we brainstormed and realized that we could teach all four of the sub-skills under "Estimation" with problems centering on "decimals and money." We then brainstormed a few explicit procedures for teaching students how to quickly round off and then add several figures - with an emphasis on using both money and decimals. This was followed by simple ways to round and then multiply (or divide) to quickly determine whether or not student could afford a certain house or car or vacation based on annual earnings. The kids liked it.

We then gave them timed exercises - some of them adapted right from our math textbook-first in small groups and then individually. (We saved these procedures and items and exercises and passed them on to another school in the district that also got low scores in "Estimation" on the SAT 9).

Measurable Results: (after assessment - shared at our November meeting)

More than 70% of students from our three classes got more than 15 items correct on our twenty-item "Estimation" test. We’re very pleased, but might revisit some of the items and procedures to make them clearer for the next go-round.
Benefits of Goal-Oriented Collaboration

Judith Warren Little

- Remarkable gains in achievement
- Higher-quality solutions to problems
- Increased confidence among all school community members
- Teaches ability to support one another's strengths and to accommodate weaknesses
- The ability to examine and test new ideas, methods and materials.
- More systematic assistance to beginning teachers
- An expanded pool of ideas, material and methods
Measurable Improvement Goals
If there is any center to the mystery of school's success, mediocrity, or failure, it lies deep within the structure of organizational goals.

The lack of agreed-upon goals for teaching makes schools organizational exception.

Susan Rosenholtz

* * * * * * * * * * * * * * *

"The annual goal statements that emerge from school improvement efforts typically have two chronic deficiencies: the proposed activities are rarely linked to student achievement, and they seldom challenge the basic elements of established practice."

Grady McGonagill

* * * * * * * * * * * * * * *

"Most district -- and state -- goals statements typically do not express commitment to setting and attaining high educational standards - for students and therefore fail to make clear the fundamental rational for decentralized decision making."

Grady McGonagill
Goals...

Integrate technology into the curriculum

Establish a Parent Outreach Program

The number of students who meet or exceed standard on end of year/course assessments will increase by 5%

Develop strategies that will promote character and responsible citizenship

The school will implement an assessment instrument to measure student growth on the Research Paper Project

Promote problem-solving/critical thinking skills across the curriculum

Revise the Science curriculum to promote discovery and hands-on involvement

Throughout the year, students will increase their reading and writing skills

All students will have maximum opportunity to participate and succeed
Student Performance Data
## Subtests and Totals

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Numbers Tested</th>
<th>Mean Raw Score</th>
<th>National Indiv. PR-S</th>
<th>Mean National NCE</th>
<th>Median GE</th>
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</thead>
<tbody>
<tr>
<td><strong>Total Reading</strong></td>
<td>76</td>
<td>49.6</td>
<td>46.5</td>
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<td>41.5</td>
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<td><strong>Total Mathematics</strong></td>
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<td>36.4</td>
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<td>Problem Solving</td>
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<td>24.4</td>
<td>45.5</td>
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<td>Procedure</td>
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<td>13.9</td>
<td>28/4</td>
<td>37.8</td>
<td>5.3</td>
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<td><strong>Language</strong></td>
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<td>28.1</td>
<td>26.4</td>
<td>36.2</td>
<td>4.7</td>
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<tr>
<td>Prewriting</td>
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<td>4.8</td>
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</table>

### Group Report for Newtown Elementary - National Grade Percentile Ranks
<table>
<thead>
<tr>
<th>Content Clusters</th>
<th>Number of Tested</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
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<td><strong>Reading Vocabulary</strong></td>
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<td>Synonyms</td>
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<td>Initial Understanding</td>
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<td>Analysis Process</td>
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<td><strong>Mathematic Problem Solving</strong></td>
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<td>Strategies Number &amp; No Relationships</td>
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<td>35</td>
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<td>Number Systems &amp; No Theory</td>
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<td>Algebra</td>
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<td>5</td>
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<td>Statistics</td>
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<td>34</td>
<td>21</td>
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<tr>
<td>Probability</td>
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<td>32</td>
<td>32</td>
<td>37</td>
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<tr>
<td>Geometry</td>
<td>7</td>
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<td>56</td>
<td>27</td>
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<td><strong>Mathematics Procedures</strong></td>
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<td>Computation</td>
<td>10</td>
<td>51</td>
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<td>Symbolic Notation</td>
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<td>Computations in Context</td>
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<td>Rounding</td>
<td>4</td>
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<td><strong>Language</strong></td>
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<td>40</td>
<td>9</td>
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<td>Composing</td>
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<td>55</td>
<td>30</td>
<td>7</td>
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<tr>
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<td>41</td>
<td>51</td>
<td>7</td>
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<tr>
<td>Mechanics/Usage</td>
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<td>45</td>
<td>10</td>
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<tr>
<td>Spelling</td>
<td>9</td>
<td>45</td>
<td>37</td>
<td>16</td>
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</tbody>
</table>
Goal 1: The percentage of our team's students who will be at or above standard in _____________ (you can substitute "Mean score" for "percentage at or above") will increase from

_______% at the end of this year (percentage / mean score) to
_______% at the end of next year

as assessed by the ________________ (ITBS; Sat 9; Terra Nova; Writing Rubric; etc.)

Specific areas to address/improve

________________________________________

________________________________________

________________________________________

Goal 2: The percentage of our team's students who will be at or above standard in _____________ (you can substitute "Mean score" for "percentage at or above") will increase from

_______% at the end of this year (percentage / mean score) to
_______% at the end of next year

as assessed by the ________________ (ITBS; Sat 9; Terra Nova; Writing Rubric; etc.)

Specific areas to address/improve

________________________________________

________________________________________

________________________________________
Annual Improvement Goals

Goal 1: The percentage of our team's students who will be at or above standard in ___Math___ (you can substitute "mean score" for "percentage at or above") will increase from

56 % at the end of this year (percentage/mean score) to
60 % at the end of next year

as assessed by the Stanford 9 (ITBS; Sat 9; Terra Nova; Writing Rubric; etc.)

Specific areas to address/improve
Number Sense and Numeration (24%)
Measurement (36%)
Estimation (42%)

Goal 2: The percentage of our team's students who will be at or above standard in ___Reading Comprehension___ (you can substitute "mean score" for "percentage at or above") will increase from

62 % at the end of this year (percentage/mean score) to
68 % at the end of next year

as assessed by the Stanford 9 (ITBS; Sat 9; Terra Nova; Writing Rubric; etc.)

Specific areas to address/improve
Interpretation (24%)
Textual (26%)
Initial Understanding (38%)
<table>
<thead>
<tr>
<th>Content Clusters</th>
<th>Objectives</th>
<th>Process Clusters</th>
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</thead>
<tbody>
<tr>
<td>Measurement</td>
<td>Measure length</td>
<td>Mathematical Connections</td>
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<tr>
<td></td>
<td>Select appropriate customary and metric units</td>
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</tr>
<tr>
<td>Estimation</td>
<td>Identify reasonableness</td>
<td>Mathematics as Problem Solving</td>
</tr>
<tr>
<td></td>
<td>Use estimation in operations with decimals and money</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use estimation in operations with whole numbers: clustering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use estimation in operations with whole numbers: compatible numbers</td>
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</tr>
<tr>
<td>Problem Solving Strategies</td>
<td>Identify missing information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solve problems using non-routine strategies</td>
<td></td>
</tr>
<tr>
<td>Number and Number Relationships</td>
<td>Compare and order decimals</td>
<td>Mathematics as Communication</td>
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<tr>
<td></td>
<td>Compare and order fractions</td>
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<tr>
<td></td>
<td>Identify alternative representations of a decimal</td>
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<tr>
<td></td>
<td>Identify alternative representations of a fraction or mixed number</td>
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<tr>
<td></td>
<td>Identify equivalent fractions including lowest terms fractions</td>
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</tr>
<tr>
<td></td>
<td>and improper fractions</td>
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</tr>
<tr>
<td></td>
<td>Identify the name for a 10 - digit whole number</td>
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</tr>
<tr>
<td>Numbers Systems and Number Theories</td>
<td>Identify the least common multiple or greatest common factor of two numbers</td>
<td>Mathematics as Reasoning</td>
</tr>
<tr>
<td></td>
<td>Identify a number that is 1000 more or 1000 less than a given number</td>
<td>Mathematics as Communication</td>
</tr>
<tr>
<td></td>
<td>Identify the place value of a digit in a decimal</td>
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</tr>
<tr>
<td></td>
<td>Identify the place value of a digit in a whole number</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identify whole -numbers expressed in expanded notation</td>
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<tr>
<td>Patterns and Functions</td>
<td>Identify missing elements in numeric patterns</td>
<td>Mathematics as Problem Solving</td>
</tr>
<tr>
<td></td>
<td>Identify missing elements in geometric patterns</td>
<td>Mathematics as Reasoning</td>
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<tr>
<td></td>
<td>Identify the output of functions (number machines)</td>
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<tr>
<td>Algebra</td>
<td>Identify a solution sequence equivalent to a problem expressed in words</td>
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<tr>
<td></td>
<td>Identify equivalent expressions that represent the identity elements for additions</td>
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<tr>
<td></td>
<td>Identify number sentences that represent the inverse operation of a given number sentence</td>
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</tr>
<tr>
<td>Statistics</td>
<td>Determine measures of central tendency and dispersion</td>
<td>Mathematical Connections</td>
</tr>
</tbody>
</table>
School Reports

Shown below is a listing of the subcategories employed at the grade 5, 8 and 11 levels for each of the five major content areas. The use of a matrix sampling approach has made it possible to reliably form, these subcategories and report their results for each school. Through use of matrix sampling, the numbers of multiple-choice items employed at the grade 5, 8 and 11 levels are 295, 385 and 225, respectively.

Mathematics assessment results are included in combined mathematics/reading school reports that are distributed to participating districts in early fall. Scores for all mathematics items from all forms are combined and an estimated mean score is calculated for each school. Mean scores are then translated into scaled scores, and each school's scaled score is compared to that of the district, the state and to a set of similar schools (based on type of community and an index of socioeconomic status). In addition, scaled scores are calculated and reported for each of the subcategories within the five major areas for each grade level.

1. Number Sense, Properties and Operations
   o Decimals (Gr. 5 & 8)
   o Fractions (Gr. 5 & 8)
   o Estimation and Rounding (Gr. 5 & 8)
   o Multiples and Factors (Gr. 5)
   o Multiples, Factors and Divisibility (Gr. 8)
   o Number Sense of Properties of Number Systems (Gr. 11)
   o Operations on Number Systems (Gr. 11)
   o Percents, Ratios and Proportions (Gr. 8 & 11)
   o Whole Number Operations (Gr. 5)
   o Whole Number Operations and Integers (Gr. 8)

2. Measurement
   o Areas, Perimeters and Volume (Gr.5)
   o Area, Perimeter, Circumference and Time (Gr. 11)
   o Area and Volume (Gr. 8)
   o Customary and metric Conversions (Gr. 5 & 8)
   o Perimeter and Circumference (Gr. 8)
   o Reasonable Measurement Units and Estimates (Gr. 5 & 8)
   o Scales and Scaled Drawings (Gr. 8)
   o Solving Problems Involving Measurement Units (Gr. 5)
   o Surface Area, Volume Unit Conversions and Scaled Drawings (Gr. 11)

3. Geometry
   o Congruent and Similar Angles and Shapes (Gr. 8)
   o Describe, Compare and Classify Geometric Shapes (Gr. 8)
   o Describe/Solve Problems Involving Intersection of Geometric Figures (Gr. 8)
   o Identification and Properties of Geometric Shapes (Gr. 5)
   o Lines and Angles (Gr. 5)
   o Properties of Circles and of Non-triangular Polygons (Gr. 11)
   o Properties of Lines and Angles, Similarity and Congruence (Gr. 11)
   o Properties of Triangles (Gr. 11)
   o Solid, Coordinate and Transformational Geometry (Gr. 11)
   o Solve Problems by Applying Geometric Properties and Relationships (Gr. 8)
   o Visualizing Constructed and Changed Shapes (Gr. 5)
   o Visualize, Draw and Construct Geometric Figures (Gr. 8)
Sample Problem: Grade 5

Ed went to the store for school supplies. He bought a notebook, 6 pencils, a pack of notebook paper, 2 erasers and a pen. If he paid with a $10 bill, how much change should Ed have received? Show each step of your math work and write an explanation of the reasoning used to complete the work.

<table>
<thead>
<tr>
<th>Price List - (Includes Tax)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eraser $ .25</td>
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<td>Notebook $4.95</td>
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<tr>
<td>Dividers $1.25</td>
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<tr>
<td>Pencils 2 for $.30</td>
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<tr>
<td>Notebook Paper $1.50</td>
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<tr>
<td>Index Cards $.65</td>
</tr>
<tr>
<td>Markers 1.25</td>
</tr>
<tr>
<td>Assignment Pad $.75</td>
</tr>
<tr>
<td>Pen $.95</td>
</tr>
</tbody>
</table>

Correct Answer: $1.20 change (spent $8.80)

Mary's Answer:  

First I added the prices of everything he bought to find out how much he spent. The pencils were 2 for 30 cents and he got 6, (6 divided 2 = 3) So he had to pay the 30 cent price 3 times (90 cents). Total spent = $8.80. Then I subtracted the $8.80 from $10 to get how much money he had left (change).  

Answer: $1.20

Credit: Advanced Understanding, Excellent (5) - A correct answer is given with computations to support it and she has written a complete explanation telling what she did and why. There is no doubt that she understands the procedures required to complete the problem correctly. She receives maximum credit because she has correct computations and a thorough explanation.

Jerry's Answer:  

I added them all up  
And then subtracted to get the answer.  

Answer: $1.20

Credit: Satisfactory Understanding (4) - A correct answer is given and computations are shown to support the answer. A written explanation is given; however, it is not very thorough. He seems to know the correct procedures to solve the problem, but he has not explained them well or did he explain why he did what he did.

Mathematics Assessment Handbook
Mr. Moser is planning to replace the roof of his home. He needs to order packs of shingles. Each pack covers 100 sq ft of room. Without a latter, Mr. Moser cannot climb to the roof to measure it. Instead he measures his attic and finds it to be 40 ft long, 24 ft wide and 5 ft high at the peak of the roof which is the center of the house. Although the roof is even with the side walls, he estimates the roof line continues 1.5 feet beyond the front and back walls. How many full packs of shingles should Mr. Moser order to cover his roof?

Show all calculations and explain them. Do all work for problem in the shaded region below. Remember you must show all the steps you used to solve the problem even if you have used a calculator. To receive the highest score, all calculations steps must be shown and verbally explained. Numerical answers must always be labeled.

**Problem Solution:**
A) Correct numerical answer of "12 or 12 packs" showing and verbally explaining the following calculations:

<table>
<thead>
<tr>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width of 1 side of roof = 12 + 5 + 1.5</td>
</tr>
<tr>
<td>= 169 + 1.5</td>
</tr>
<tr>
<td>= 13 + 1.5</td>
</tr>
<tr>
<td>= 14.5 ft</td>
</tr>
<tr>
<td>Length of roof</td>
</tr>
<tr>
<td>= 40 ft</td>
</tr>
<tr>
<td>Area of 1 side</td>
</tr>
<tr>
<td>= (14.5) (40)</td>
</tr>
<tr>
<td>= 580 sq ft</td>
</tr>
<tr>
<td>Area of 2 sides</td>
</tr>
<tr>
<td>= (2) (580)</td>
</tr>
<tr>
<td>= 1160 sq ft</td>
</tr>
<tr>
<td># of packs</td>
</tr>
<tr>
<td>= (1160) / (100)</td>
</tr>
<tr>
<td>= 11.6 = 12 packs</td>
</tr>
</tbody>
</table>

OR
B) The student may interpret the 1.5 ft to be the perpendicular distance the end of the roof to the front of the house (see diagram). Using similar right triangles, the following calculations should be shown:

\[
\frac{13}{12} = \frac{X}{1.5} \\
12 \times x = 19.5 \\
X = 1.625
\]

4. Satisfactory Understanding

Student response contains correct numerical answer with all steps shown and verbally explained or identified.

3. Almost Satisfactory Understanding

A. The response includes:
   1. Correct numerical answer (12 or 12 packs)
   2. Adequate work shown and/or explained. Some steps or verbal explanation missing but you can tell what is being done. (Note: labeling diagram 5-12-13 is acceptable work for the Pythagorean theorem).
   3. With or without correct label

   OR

B. The response includes:
   1. Incorrect numerical answer due to a calculation or copying error or the number is not rounded correctly to 12 packs
   2. Adequate work shown and/or explained.
   3. With or without correct label.

2. Partial Understanding

A. The response includes:
   1. Correct numerical response (12 or 12 packs)
   2. Minimal work shown
   3. Minimal or no verbal explanation and/or incorrect label
<table>
<thead>
<tr>
<th>COURSE</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MATH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algebra I</td>
<td>57</td>
<td>59</td>
<td>61</td>
</tr>
<tr>
<td>Algebra II</td>
<td>74</td>
<td>70</td>
<td>62</td>
</tr>
<tr>
<td>Geometry</td>
<td>36</td>
<td>41</td>
<td>42</td>
</tr>
<tr>
<td><strong>SOCIAL STUDIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. History</td>
<td>70</td>
<td>62</td>
<td>65</td>
</tr>
<tr>
<td>World History</td>
<td>68</td>
<td>69</td>
<td>73</td>
</tr>
<tr>
<td><strong>ENGLISH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman English</td>
<td>39</td>
<td>41</td>
<td>45</td>
</tr>
<tr>
<td>Sophomore English</td>
<td>43</td>
<td>48</td>
<td>55</td>
</tr>
<tr>
<td>Junior English</td>
<td>50</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>Senior English</td>
<td>56</td>
<td>64</td>
<td>75</td>
</tr>
<tr>
<td><strong>SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td>44</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>Biology</td>
<td>51</td>
<td>55</td>
<td>53</td>
</tr>
<tr>
<td>Chemistry</td>
<td>60</td>
<td>66</td>
<td>65</td>
</tr>
</tbody>
</table>
### Running Record Quarterly Chart

<table>
<thead>
<tr>
<th>STUDENT NAME</th>
<th>LEVEL</th>
<th>A.R.</th>
<th>COMP.</th>
<th>LEVEL</th>
<th>A.R.</th>
<th>COMP.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

A.R. = Accuracy Rate  
Independent = 95% - 100%  
Instructional = 90% - 94%  
Frustration = Below 90%

### Grades Overview

<table>
<thead>
<tr>
<th></th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd Grade</td>
<td>43%</td>
<td>62%</td>
<td>76%</td>
</tr>
<tr>
<td>3rd Grade</td>
<td>60%</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>4th Grade</td>
<td>33%</td>
<td>58%</td>
<td></td>
</tr>
<tr>
<td>5th Grade</td>
<td>79%</td>
<td>84%</td>
<td></td>
</tr>
</tbody>
</table>
## Grade Level Writing Data

Percentage of students writing at the exiting grade level standard:

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>August</th>
<th>November</th>
<th>January</th>
<th>March</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>6%</td>
<td>28%</td>
<td>39%</td>
<td>60%</td>
<td>84%</td>
</tr>
<tr>
<td>First Grade</td>
<td>5%</td>
<td>30%</td>
<td>45%</td>
<td>48%</td>
<td>82%</td>
</tr>
<tr>
<td>Second Grade</td>
<td>15%</td>
<td>44%</td>
<td>55%</td>
<td>57%</td>
<td>78%</td>
</tr>
<tr>
<td>Third Grade</td>
<td>2%</td>
<td>8%</td>
<td>14%</td>
<td>29%</td>
<td>58%</td>
</tr>
<tr>
<td>Fourth Grade</td>
<td>5%</td>
<td>29%</td>
<td>53%</td>
<td>63%</td>
<td>76%</td>
</tr>
<tr>
<td>Fifth Grade</td>
<td>39%</td>
<td>55%</td>
<td>50%</td>
<td>58%</td>
<td>61%</td>
</tr>
</tbody>
</table>

Range of increase at grade levels - August to March 19% to 55%

WRITING.DAT

## Mesa Verde Elementary Writing Data:

Percentage of students writing at the exiting grade level standard:

<table>
<thead>
<tr>
<th>Month</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>12%</td>
</tr>
<tr>
<td>November</td>
<td>32%</td>
</tr>
<tr>
<td>January</td>
<td>41%</td>
</tr>
<tr>
<td>March</td>
<td>51%</td>
</tr>
<tr>
<td>May</td>
<td>73%</td>
</tr>
</tbody>
</table>

Increase since August: 61%

Student Population: 652
Assessment Checklist - Grades 1 and 2

<table>
<thead>
<tr>
<th>Knows all letter names (capital and lower case)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows all letter sounds (consonants)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-to-one correspondence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knows basic grade level sight vocabulary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-corrects and used decoding skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes and confirms predictions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selects a variety of appropriate reading materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-tells stories and is able to construct meaning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses written information to follow directions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reads fluently at appropriate level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Referrals to Peace Builders Room Through Third Quarter

![Graph showing referrals](image-url)
Anonymous Science End of Course/Semester
Data Reporting Sheet

Date: ________________________________

Course: ________________________________
(e.g. "Biology", "chemistry", "Honors Chemistry" etc.)

Number of students who took the exam _______________________

Number of students who reached standard (received a 70% or better on the exam)
______________________________

Please Note:

1. This form is only for the purpose of monitoring and analyzing collective performance of students in a course-not to determine how individuals performed relative to each other.

2. You do not have to calculate percentages; this will be done by the department chair or his or her designee. HOWEVER, you should keep a Xerox copy of these figures for yourself.

3. All department members will receive payment ($100) for assessment development efforts after copies of all assessments have been turned in to Mike Schmoker and when all end-of-semester data has been turned in.
Assessment has to drive the educational change agenda around learning and student achievement.

Michael Fullan

**Australian Exam Question**
Examine the construction and representation of Australia's cultural identity over time.
Exhibit 77

Each score category contains a range of student responses that reflect the descriptions given below.

Score 3
The student has demonstrated a full and complete understanding of all concepts and processes embodied in this application. The student has addressed the task in a mathematically sound manner. The response contains evidence of the student's competence in problem-solving and reasoning, computing and estimating, and communicating to the full extent that these processes apply to the specified task. The response may, however, contain minor arithmetic errors that do not detract from a demonstration of full understanding.

Score 2
The student has demonstrated a reasonable understanding of the essential mathematical concepts and processes embodied in this application. The student's response contains most of the attributes of an appropriate response including a mathematically sound approach and evidence of competence with applicable mathematical processes, but contains flaws that do not diminish countervailing evidence that the student comprehends the essential mathematical ideas addressed by this task. Such flaws include errors ascribable to faulty reading, writing, or drawing skills; errors ascribable to insufficient, nonmathematical knowledge; and errors ascribable to negligent or inattentive execution of mathematical processes or algorithms.

Score 1
The student has demonstrated a limited understanding of the concepts and process embodied in this application. The student's response contains some of the attribute of an appropriate response, but lacks convincing evidence that the student fully comprehends the essential mathematical ideas addressed by this task. Such deficits include evidence of insufficient mathematical knowledge; errors in fundamental mathematical procedures; and other omissions or anomalies that bring into questions the extent of the student's ability to solve problems of this general type.

Score 0
The student has demonstrated merely an acquaintance with the topic. The student's response is associated with the task in the item, but contains few attributes of an appropriate response. There are significant omissions or anomalies that indicate a basic lack of comprehension in regard to the mathematical ideas and procedures necessary to adequately address the specified task. No evidence is present to suggest that the student has the ability to solve problems of this general type.
Exhibit 76

Each score category contains a range of student responses that reflect the descriptions given below.

Score 3
The response is an excellent answer to the question. It is correct, complete and appropriate and contains elaboration, extension, and/or evidence of higher-order thinking and relevant prior knowledge. There is no evidence of misconceptions. Minor errors will not necessarily lower the score.

Score 2
The response is a proficient answer to the question. It is generally correct, complete, and appropriate although minor inaccuracies may appear. There may be limited evidence of elaboration, extension, higher-order thinking, and relevant prior knowledge, or there may be significant evidence of these traits, but other flaws (e.g., inaccuracies, omissions, inappropriateness) may be more than minor.

Score 1
The response is a marginal answer to the question. While it may contain some elements of a proficient response, it is inaccurate, incomplete, and/or inappropriate. There is little if any evidence of elaboration, extension, higher-order thinking, or relevant prior knowledge. There may be evidence of significant misconceptions.

Score 0
The response, although on topic, is an unsatisfactory answer to the question. It may fail to address the question, or it may address the question in a very limited way. There may be no evidence of elaboration, extension, higher-order thinking, or relevant prior knowledge. There may be evidence of serious misconceptions.
The Sciences

Graduation Requirement
The L.H.S. graduate applies skills and scientific concepts to explain his/her world, find solutions for its problems, and suggest improvement in the quality of life.

Specific Skills
Uses skill-observing, communicating, comparing, ordering, categorizing, relating, inferring, and applying to explain his/her world, solve problems.

Demonstration (1 pf 2) Science Experiment
The Student
1) designs an experiment (which must be approved by science teacher);
2) tests the hypothesis;
3) interprets results and draws conclusions;
4) prepares written report;
One of the following themes will be assigned: Energy, Interactions, Patterns, or Change.

Testing Conditions
Under direction of classroom teacher or approved proctor.
Periodic checks: minimum of three.
Time: established by classroom teacher or proctor in conjunction with student.
No revision of final report.

Standards

Proficient
Design an experiment, including all steps of the scientific method.
Design an experiment which allows for the testing of a hypothesis with one experimental variable.
Present data appropriately, with accurate graphs, figures, etc.
Explain correctly how results of experiment support or do not support the hypothesis.
Respond appropriately and orally to questions regarding the experiment and results.
Write a report which meets appropriate writing standards as provided at the end of this book.

Excellent
Achieve all standards for proficient.
Design an experiment which tests for the effect of more than one experimental variable.
After explaining results, draw parallels between related scientific laws, principles, and/or phenomena; also, where possible, explain reasons for anomalies in the parallels drawn.
Integrate at least two branches of science as they apply to the experiment.

Unacceptable
Lacks any one of the proficient standards.
United States Government/Free Enterprise Assessment Model

Outcome: The student will write a document based essay which analyzes and develops a solution to a current problem in the United States.

<table>
<thead>
<tr>
<th>Task Overview and Context</th>
<th>The student will:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) choose a current problem or issue affecting life in the United States</td>
</tr>
<tr>
<td></td>
<td>b) read and analyze documents related to the problem selected</td>
</tr>
<tr>
<td></td>
<td>c) write an essay proposing a solution to the problem</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameters/ Special Conditions</th>
<th>1. The problem must</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) be unresolved</td>
</tr>
<tr>
<td></td>
<td>b) directly affect social, political, geographic or economic conditions in the United states</td>
</tr>
<tr>
<td></td>
<td>c) be viewed from two or more social studies perspectives</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameters/ Special Conditions</th>
<th>2. The teachers and/or student will assemble a minimum of 3 documents which address the problem or issue. The documents may consist of any of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) published articles from journals, newspapers, or magazines</td>
</tr>
<tr>
<td></td>
<td>b) selected text from books</td>
</tr>
<tr>
<td></td>
<td>c) transcripts of radio or TV broadcasts</td>
</tr>
<tr>
<td></td>
<td>d) pamphlets from government, interest groups, or social agencies</td>
</tr>
<tr>
<td></td>
<td>3) notes from guest speakers</td>
</tr>
<tr>
<td></td>
<td>f) notes from other media sources</td>
</tr>
<tr>
<td></td>
<td>g) notes from a personal interview</td>
</tr>
</tbody>
</table>

| Parameters/ Special Conditions | 3. One copy of each student selected documents must be submitted for teacher approval prior to the writing date. |
# United States Government/Free Enterprise Rubric

**Prerequisites:**
Three or more documents are cited
All cited documents are submitted with the folder
The essay is word processed according to the GUHSD Style Sheet
Student writing on the documents must conform to Teacher or Student Directions.

<table>
<thead>
<tr>
<th>Outstanding</th>
<th>Highly Successful</th>
<th>Successful</th>
<th>Not Yet Successful</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Problem</strong></td>
<td><strong>I. Problem</strong></td>
<td><strong>I. Problem</strong></td>
<td><strong>I. Problem</strong></td>
</tr>
<tr>
<td>The essay specifically identifies and thoroughly explains why the issue is a current problem in the US. Discusses in depth the background or causes, effects, or impact of the problem, using the social studies perspectives, and a relevant and realistic goal is clearly stated.</td>
<td>The essay specifically identifies and explains in detail why the issue is a current problem in the US. Discusses in detail the background or causes, effects, or impact of the problem, using the social studies perspectives, and a relevant and realistic goal is clearly stated.</td>
<td>The essay generally identifies and explains in detail why the issue is a current problem in the US. Generally discusses the background or causes, effects, or impact of the problem, using the social studies perspectives, and a relevant and realistic goal is clearly stated.</td>
<td>The essay does not explain why the issue is a current problem in the US. Little or no discussion of the background or causes, effects, or impact of the problem, nor use of the social studies perspectives, or the goal is neither relevant nor realistic and it is not clearly stated.</td>
</tr>
<tr>
<td><strong>II Alternative Solutions</strong></td>
<td><strong>II Alternative Solutions</strong></td>
<td><strong>II Alternative Solutions</strong></td>
<td><strong>II Alternative Solutions</strong></td>
</tr>
<tr>
<td>The essay proposes 3 or more realistic solutions relevant to the state goal and thoroughly explains several strengths and several weaknesses of each alternative solution and show evidence of original thinking.</td>
<td>The essay proposes 3 or more realistic solutions relevant to the stated goal and explains in detail several strengths and several weaknesses of each solution.</td>
<td>The essay proposes 3 or more realistic solutions relevant to the stated goal and generally identifies one or more strengths and several weaknesses or each for each alternative solution.</td>
<td>The essay proposes fewer than 3 realistic solutions which are relevant to the stated goal or does not identify a strength and/or weakness for each alternative solution.</td>
</tr>
<tr>
<td><strong>III Recommended Solutions</strong></td>
<td><strong>III Recommended Solutions</strong></td>
<td><strong>III Recommended Solutions</strong></td>
<td><strong>III Recommended Solutions</strong></td>
</tr>
<tr>
<td>The essay recommends a relevant and realistic solution, and provides a thorough justification for that recommendation, including discussion of trade-offs, opportunity costs and/or short and long term effects.</td>
<td>The essay recommends a relevant and realistic solution, and provides justification in detail for the recommendation being selected.</td>
<td>The essay recommends a relevant and realistic solution, and provides a general justification in detail for the recommendations being selected.</td>
<td>The essay recommends no solution, or provides no justification for the recommendation being selected.</td>
</tr>
<tr>
<td><strong>IV Language Conventions</strong></td>
<td><strong>IV Language Conventions</strong></td>
<td><strong>IV Language Conventions</strong></td>
<td><strong>IV Language Conventions</strong></td>
</tr>
<tr>
<td>The paper contains varied and structurally correct sentences, with precise and persuasive vocabulary, and is virtually free of errors in usage and mechanics.</td>
<td>The paper contains varied and structurally correct sentences, with precise vocabulary, and some minor errors in usage and mechanics.</td>
<td>The paper uses correct sentences, with some variety, adequate vocabulary, and generally correct usage and mechanics.</td>
<td>Comprehension is difficult, or the paper contains many errors in any of the following: sentence structure, vocabulary, usage, or mechanics.</td>
</tr>
</tbody>
</table>
Research: And Development
Purpose: To Improve Reading Results

Options…?

1. SQ3R Training (Survey, Question, Read, Recite, Review) across the disciplines

2. Multiple Intelligences training

3. Reciprocal Reading training

4. Technology training

5. Monthly teacher team meetings: to discuss better ways to
   a) teach assessed standards; and
   b) effectively implement proven practices

6. Brain-based learning training

7. Reading improvement training: taught by highest scoring teachers or teams in district

8. Multi-disciplinary instruction training
Opportunities to address weaknesses in reading comprehension/vocabulary/word study skills

Identify - and learn from - highest-achieving teachers or teams in your district/area. Periodic or quarterly assessment/data-gathering/charting-by grade level, team and school. Intensive, daily alphabet, sound, and word exercises for early readers *until they master decoding of simple texts.*

Level-grouping/personnel deployment during earliest grades: every available person teaching during reading block (special ed, aides, music, art, counselor, etc.)

- Lowest readers: no more than 6 students in groups
- Grade-Level readers: as many as 15- or more - in a group

Increased SSR (Sustained silent Reading) time - throughout school day and at home, K-12.

- Assemble/organize texts by "ZPD" (Zone of Proximal Development) so that all students are reading at appropriate level of challenge
- At-home reading/re-reading system: monitor, chart and celebrate progress toward reading goals
- Become obsessive about increasing the number of minute skids are engaged in text (goal: as much or more time should be spent reading than all other reading activities combined)
- Paired reading - teach kids to properly assist (vs. "enable") each other as they take turns reading aloud.

LOTS of interpretive questioning, predicting and discussing before, during, and after shared readings and read-alouds. Do this incessantly (SQ3R; Reciprocal Reading, KWL)

- Create a "bank" of pre-reading/higher-order questions for various shred texts

Tutoring for struggling early-grade readers: lunchtime; before, during and after school

Walk-around audit conducted by Reading specialists/principal/teacher-are all kids engaged 100% of the time in productive, appropriate reading activities? Start with first grade.

Systematic vocabulary instruction - suggested procedure (4 - 5 minutes per word):

- Introduce definition out loud for entire class
- Have students talk briefly about its meaning in pairs
- Have them represent the word graphically
- Review vocabulary words periodically

(3 words per day/450 words per year = @ 6 months additional growth in reading/vocabulary!!)
Establish strict monthly schedule of teacher team meeting to discuss:

1. Specific reading problems/improvement opportunities
2. Solutions of these problems (consists with proven practice)
3. Keep a log of these breakthrough solutions; document, recognize and celebrate these

Set and celebrate monthly or quarterly measurable reading goals attained by teams and school, e.g.:

Books read; skills/site words/vocabulary mastered; increases in average words per minute

The best kind of test preparation: Find every opportunity to read/listen to fiction and non-fiction; to then discuss or write responses/interpretations of higher-order questions like: (adapted from Stanford 9 and ITBS)

[At certain points during the story] What do you think might happen next? Why?

Why do you think this (real/fictional) character did ________________?

What do you think is meant by "_______________" in the story?

How do you think this (real/fictional) character felt when ________________? At the end of the story, (real/fictional character) realized that ________________?

There is enough information in the (passage/story) to show us that ________________?

What action might have been taken instead of ________________?

How would you describe this (real/fictional) character? What sort of person is he/she?

What is the explanation for ________________ in the story?

… and limitless "Why ________________?" questions

Miscellanies

Use Dolch list in early grades - to guide emergent reading and word acquisition efforts

KWLSQ3R-employ thee vigorously in every subject area for every reading assignment at every grade level

Remember the "Logical Efficacy": teacher's belief in student ability = student confidence - accelerated learning
Recognition Nomination Form

Nominations should focus on extra effort made toward reaching school goals. For example:

- Exercising leadership
- Maintaining a constructive, positive attitude toward reaching school learning goals
- Helping to develop common, periodic assessments
- Implementing and sharing new teaching ideas that promote better results
- Gathering or organizing data and evidence of improvement
- Helping to ensure that meetings are efficient and effective - that they result in great teaching ideas that get improved results for students

I nominate __________________ of outstanding effort in helping our school to reach its measurable student learning goals. He/She has helped us to make progress toward our school goals by:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
Annual School Improvement Planning Process / Checklist

1. **Take Stock:** During the summer - after year end student performance data has come in - entire faculty should:

   a) **Celebrate accomplishments!** What data or evidence do we have of success? What have we learned from our successes - or frustrations?
   b) **Review key data/indicators** (like the following): in an atmosphere of trust, where staff have an opportunity to help establish goals and where items like the following might be taken into account:

   - Preview year's goals - met or not?
   - Year-end district Writing and CRT (Criterion-Referenced Test) data
   - Standardized test data
   - End-of-year / course assessment data
   - Attendance / Tardy data
   - Data on number of discipline referrals / suspensions and expulsions
   - Disaggregated data (e.g., lowest achieving subgroup, free and reduced lunch population)
   - Number of % of students receiving A's and B's in subject areas/ courses
   - Number of % of students receiving D's and F's in subject areas/courses
   - Number of % of students successfully completing Algebra, Geometry, Advanced Science courses
   - Climate / satisfaction surveys from students, teachers and parents

2. **Grade-level or course** teams (e.g. 7th grade Science) should select one or two subject area targets for improvement - based on step 1. Remembers:

   a) One or two subject - area goals is plenty.
   b) Goals should be specifically targeted to measurable improvement in student achievement (e.g., "student math performance") or behavior ("to reduce # of classroom disruptions school-wide").

3. **Write measurable student achievement goals for each area selected in step 2.** (see attached "Annual Improvement Goals" form.) These may be written by school, grade-level or department. **POST THE GOALS PROMINENTLY IN AREA(S) WHERE TEACHERS MEET.**
4. **Send all goals to district office committee for final approval** (e.g., committee may consist of district curriculum director, principals and teachers.) District committee will review and return goals with feedback in a timely fashion.

5. **Collect and consult classroom-tested research:** Consult research relative to the established goals. (seek assistance from district office / staff development personnel).

   Discuss effective ways to ensure successful implantation by teachers.

6. **Establish clear, simple periodic assessments, relative to goals.** Progress on these should be charted regularly (ideally at least four times per year). Assessments must be developed and established prior to beginning of the school year if at all possible.

7. **Set dates and times for short, effective, monthly improvement meetings** - to analyze assessment data, brainstorm for improvement and corrective actions. These are vital to improvement; they should be scheduled prior to the beginning of the school year and protected from any outside interference. These regularly-held discussions should center on:

   - Sharing/generating concrete improvement strategies
   - What's working? Share measurable "breakthroughs" in student learning
   - Successful implementation of research-based strategies
   - Performance data and analysis - what progress, strengths, and weaknesses does it reveal?

   *Update quarterly charts to display measurable progress toward goals*

   Data analysis/corrective action meetings can occur after school or during:

   - early release days
   - faculty meeting
   - staff development
   - grade level meetings
   - department meetings
   - staff development days

8. **Establish recognition procedures and routines:** e.g., briefly acknowledge specific goal-oriented efforts and accomplishments by individuals and teams at the beginning of each staff / improvement meeting.
Key Questions

1. Do all teachers at all times during the school year, know their limited number of annual improvement goals - to the number? E.g. "to improve in Reading form 39% of students at or above grade level to 44% by the end of the school year."

   What evidence do you have of this?

2. When are your (at least monthly) improvement meetings scheduled?

3. Can every teacher, at any point during the school year, tell you precisely which areas of weakness their team is currently concentrating on during their regular team meetings?

   (e.g. "measurement" or "statistics and probability" in Math - or related sub-skills subsumed within these).

4. What successful strategies have been generated, refined and learned to promote improvement in the identified areas of weakness?

*these questions, or variations on them, should be asked continuously throughout the school year by district office and building administrators and by designated teacher leaders.
Follow-Up Guide: To ensure high probability for success with collaborative, data-driven school improvement efforts:

1. The Basics: Select a date, early in the school year, for ALL STAFF to analyze data, set goals and identify specific areas of weakness

   Goals should be LIMITED in number (Use or adapt "Annual Improvement Goals" form, in handout)

   Establish dates and times for team meetings; these are sacrosanct

   Be sure that every teacher, at every meeting has the following in their "Teamwork Took Kit"

   "Improvement Goal" form
   The appropriate interpretive guide(s) for state assessments
   Rubrics, anchor paper wherever appropriate
   Meeting or brain storming guidelines
   Team Learning Logs

Collect and review Team Learning Logs at both building and district level.

Celebrate and reward any successes recorded on Team Learning Logs

Disseminate successes to all teachers who are teaching the same skills or grade levels

Establish regular times for Recognition/Celebration opportunities at school and district level

II. Create, adapt, assemble, organize and disseminate formative assessments

   Start by creating, sharing or assembling topical (specific skill) assessments in lowest-scoring areas on test report

   Begin, even on a small scale, to create quarterly, trimesterly or semesterly assessments for certain key courses (e.g. Algebra I; Math or Writing or Reading for grades where state assessments are not given)

   Assessments must prepare students for state/district assessments - and also be authentic and meaningful

   Funds to pay teachers for this work will probably need to be set aside to ensure success here. Representative teams of teachers can be paid during the summer or for work done during the year.

III. End-of Course Assessments must be developed

Start with courses and grade levels not tested by state assessments
Begin to include at least some small performance or essay-based component in these assessments (see RESULTS handout)

**IV. Launch an all-out assault on reading deficiencies at every grade**

Increase time spent reading, especially for struggling students, with additional time, sections (shoot for 40 - 60 minutes; divide the time if necessary)

Have students regularly write, discuss, summarize and interpret what they read

Do audit/walkthrough of K-3 reading program with teachers and administrators at every school (criteria can include elements on in RESULTS handout)

Provide direct instruction in vocabulary at every school. Use lists linked to state assessments, e.g. EDL Core Vocabularies which are linked to Sanford 9; Barron's Guide to the Scholastic Achievement Test contains words frequently found on the SAT.

The most effective, engaging way to teach vocabulary is found near the bottom on the page on RESULTS handout (from research by Bob Marzano)

**V. Administrators, Department heads, Teacher Leaders at every level must ask "Key Questions" regularly (see handout)**

Answers to these and similar questions must be topics for administrative improvement meetings, where problems are addressed and successes are shared

Administrators must discuss such issues at least monthly as a routine part of administrative meetings (brainstorming can be effective here)

**VI Conduct a "Lesson Fair," as soon as possible, where teachers attend staff development sessions given by in-district teachers.**

Any teacher is eligible to conduct a session, if they or their team has had high measurable success in any specific skill and proficiency areas on annual or formative assessments.

Examine data to find teachers who have comparatively higher achievement; observe, interview and disseminate what you learn from these teachers.

For starters, sponsor an event with even a few teachers ("The third grade team at Jefferson Elementary will present successful strategies and lessons for teaching "Measurement" between 3:00 and 5:00 at the board room on Wednesday, October 12")

Pay teachers to present as well as to attend the Lesson Fairs (there is no better use of staff development / entitlement funds).

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