

<p style="text-align: center;"><b>Using Data and Strategies to Improve Achievement and Organizational Development</b></p> <p style="text-align: center;"><b>I will be able to . . .</b></p> <ol style="list-style-type: none"> <li>1. Describe the changes related to students and the educational context.</li> <li>2. Know how to collect, analyze, interpret, and use data.</li> <li>3. Determine the strengths and needs of my school's school improvement process.</li> <li>4. Be able to apply expert knowledge by using a variety of implementation tools, methods, and strategies.</li> <li>5. Be able to use data to improve student learning and performance.</li> <li>6. Be able to use data to improve teacher and organizational effectiveness.</li> <li>7. Know additional ways to reduce achievement gaps and intervene when students have special learning needs.</li> <li>8. Know how to increase my leadership capacity and credibility.</li> <li>9. Be familiar with highlights of professional knowledge related to supervision, curriculum, assessment, instruction, educational technology, culture and climate, professional development, and school improvement.</li> </ol>	<p style="text-align: center;"><b>Changes about Students and the Educational Context</b></p> <p><b>Students . . .</b></p> <ol style="list-style-type: none"> <li>1. have short attention spans and hate to be bored.</li> <li>2. are visually preferred.</li> <li>3. want immediate gratification.</li> <li>4. choose to be interactive and hands-on.</li> <li>5. love challenge and are curious.</li> <li>6. want to succeed (win) using strategies, practice, and do-overs.</li> </ol> <p><b>Students rarely play video or recreational games without . . .</b></p> <ol style="list-style-type: none"> <li>1. Knowing the objectives/ goals.</li> <li>2. Learning and using strategies and skills.</li> <li>3. Learning and using the vocabulary.</li> <li>4. Knowing how well they are doing at all times.</li> <li>5. Deciding what to do to get better next time.</li> </ol> <p><b>There are other important changes to our educational context.</b></p> <ol style="list-style-type: none"> <li>1. Accountability</li> <li>2. The art and science of teaching and learning</li> <li>3. Teachers (e.g., experience, demographics)</li> <li>4. Educational resources</li> </ol>
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## Leadership Behaviors

<b>1. Expect</b> How will leaders consistently communicate a vision, standards, goals, and high expectations for student and teacher learning?	<b>2. Direct</b> How will leaders define improvement objectives and expected standards, inspire involvement, and provide ongoing professional learning, resources, and support?
<b>3. Inspect</b> How will leaders inspect data, curriculum, instruction, assessment, culture and climate, the learning environment, teacher performance, and organizational operations?	<b>4. Respect</b> How will leaders show empathy, trust confidence, and flexibility, and recognize progress and accomplishment?
<b>5. Reflect</b> How will leaders examine results, determine progress, and encourage the need for implementation of adjustments?	

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**A Collaborative Process to Improve Student Achievement  
and Teacher Effectiveness and Satisfaction**

Stage	Actions
<p align="center"><b>1</b> <b>Preparing Your Team</b></p>	<ol style="list-style-type: none"> <li>1. Determine the team members (e.g., grade, course, program-alike, cross-disciplinary).</li> <li>2. Communicate expectations about roles, responsibilities, processes, and contributions.</li> <li>3. Prepare the group to work in the team by communicating guidelines and norms.</li> <li>4. Prepare the setting for the meetings by including copiers, computers, projectors, highlighters, flipcharts, etc.</li> </ol>
<p align="center"><b>2</b> <b>Collecting Data</b></p>	<ol style="list-style-type: none"> <li>1. Review the school's/district's vision of teaching and learning/the "future-perfect school."</li> <li>2. Examine learning goals, standards, and objectives.</li> <li>3. Define essential questions about student learning needs.</li> <li>4. Determine evidence (indicators) required to answer the questions.</li> <li>5. Determine measures needed to collect the evidence/data required to answer the questions.</li> <li>6. Conduct an inventory of available measures and review the efficacy of the measures.</li> <li>7. Gather the data.</li> <li>8. Create data tables and represent the data graphically (e.g., pie charts, bar graphs, line graphs, scatter plots).</li> </ol>
<p align="center"><b>3</b> <b>Analyzing and Interpreting Data</b></p>	<ol style="list-style-type: none"> <li>1. Review data tables and graphic representations.</li> <li>2. Identify observations, patterns, and trends.</li> <li>3. Document findings for others to view.</li> <li>4. Hypothesize contributing factors.</li> <li>5. Identify connections to the school and classroom.</li> <li>6. Interpret the results.</li> <li>7. Identify strengths and the greatest areas of need.</li> <li>8. Create a school, grade level, or subject profile of student achievement.</li> </ol>
<p align="center"><b>4</b> <b>Creating Improvement Goals and Plans</b></p>	<ol style="list-style-type: none"> <li>1. Define/affirm mission, vision, and beliefs.</li> <li>2. Define the results for student learning.</li> <li>3. Determine school improvement goals.</li> <li>4. Become knowledgeable about research-based, best practices and correlate them to current practices.</li> <li>5. Create an implementation plan including objectives, timeline, expectations, and monitoring and adjustment strategies.</li> <li>6. Allocate and acquire resources.</li> </ol>
<p align="center"><b>5</b> <b>Preparing to Implement a Plan</b></p>	<ol style="list-style-type: none"> <li>1. Participate in needed/desired professional development.</li> <li>2. Create units, lessons, resources, assessments, and student and teacher support systems to use during implementation.</li> </ol>
<p align="center"><b>6</b> <b>Implementing Plans, Monitoring Progress, and Making Adjustments</b></p>	<ol style="list-style-type: none"> <li>1. Take decisive actions to increase student achievement.</li> <li>2. Monitor implementation by discussing progress regularly using collaborative protocols.</li> <li>3. Make necessary changes.</li> <li>4. Determine what individuals and the team are learning.</li> </ol>
<p align="center"><b>7</b> <b>Evaluating and Celebrating Progress</b></p>	<ol style="list-style-type: none"> <li>1. Determine what the team is learning.</li> <li>2. Recognize and "radically" celebrate progress.</li> <li>3. Continue to make adjustments and problem solve.</li> <li>4. Repeat the cycle by selecting new areas of needed/desired improvement.</li> </ol>

<b>1</b>	<b>Preparing Your Team</b>
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- Meeting in professional teams (job, content, grade-alike, and interdisciplinary) . . .**
1. reinforces attention to a school improvement focus.
  2. provides opportunities to focus on improvement targets and core problems.
  3. provides opportunities to determine the impact of professional development.
  4. stimulates collegial conversation and a desire for continuous improvement
  5. provides more plausible interventions.
  6. deepens understanding about what is really going on at the school.
  7. expands leadership capacity in the school to include teacher leaders.
  8. provides all school staff with a broader view of the learning environment.
  9. provides opportunities for focused, reflective, and collaborative professional learning.
  10. helps determine real student and teacher needs in the classroom.

**PROFESSIONAL TEAM NORMS AND COMMITMENTS**

WHEN ESTABLISHING NORMS, CONSIDER:	PROPOSED NORMS AND COMMITMENTS:
<b>TIME</b> •When do we meet? •Will we set a beginning and ending time? •Will we start and end on time?	<b>WE WILL START THE MEETING WITH ALL MEMBERS PRESENT AT _____</b> <b>WE WILL REMAIN IN THE MEETING</b> until it ends at _____.
<b>LISTENING</b> •How will we encourage listening? •How will we discourage interrupting?	<b>WE WILL INVITE AND WELCOME</b> the contributions of every member and listen to each other.
<b>CONFIDENTIALITY</b> •Will the meetings be open? •Will what we say in the meeting be held in confidence? •What can be said after the meeting?	<b>WE WILL KEEP CONFIDENTIAL</b> our discussions, comments, and deliberations with the exceptions of required meeting minutes.
<b>DECISION MAKING</b> •How will we make decisions? •Are we an advisory or a decision-making body? •Will we reach decisions by consensus? •How will we deal with conflicts?	<b>WE WILL WORK TOGETHER</b> as a community that values consensus rather than majority rule. <b>WE WILL BE RESPONSIBLE</b> for examining all points of view before a consensus is accepted. <b>WE WILL BE GUIDED BY</b> the school mission, vision, parameters, policies, and procedures.
<b>PARTICIPATION</b> •How will we encourage everyone's participation? •Will we have an attendance policy?	<b>WE WILL BE INVOLVED</b> to our individual level of comfort with a goal of balanced participation.
<b>EXPECTATIONS</b> •What do we expect from members? •Are there requirements for participation?	<b>WE WILL BE FULLY "PRESENT"</b> at the meeting by becoming familiar with materials before we arrive and by being attentive to behaviors which affect physical and mental engagement. <b>WE WILL CREATE AN AGENDA</b> in collaboration with our supervisor and submit minutes from the meetings. <b>WE WILL ENGAGE IN GROUP ACTIVITIES</b> that will focus on increasing student achievement.
<b>ATMOSPHERE/CLIMATE</b>	<b>WE WILL OPERATE</b> in a collegial and friendly atmosphere. <b>WE WILL BE RESPONSIBLE</b> for airing disagreements during the meeting rather than carrying those disagreements outside the meeting.

*Source: Keys to successful meetings by Stephanie Hirsh, Ann Delehant, and Sherry Sparks. Oxford, Ohio: National Staff Development Council, 1994.*

**Six Roles for Data**

1. Improving decision making
2. Describing processes, practices, progress
3. Examining belief systems
4. Mobilizing for action
5. Monitoring implementation of changes
6. Accountability

Johnson, Ruth S (1996). *Setting our sights: Measuring equity in school change*. Los Angeles, CA: Achievement Council.

<b>Student Achievement/Discipline Data</b>	<b>Demographic Data</b>
<p>This type of data can include such items as the following:</p> <ol style="list-style-type: none"> <li>1. report card grades</li> <li>2. performance assessments and portfolios</li> <li>3. Ds and Fs list</li> <li>4. school/district standardized norm-referenced tests</li> <li>5. state tests</li> <li>6. observations of student performance</li> <li>7. student work artifacts</li> <li>8. criterion-referenced tests</li> <li>9. course enrollments (e.g., advanced placement)</li> <li>10. courses, honors classes, core curriculum etc.)</li> <li>11. graduation, retention, and dropout rates</li> <li>12. post-high school choices (e.g., college attendance, military, work)</li> <li>13. discipline referral data</li> <li>14. attendance rates</li> <li>15. tardiness rates</li> </ol>	<p>Demographic data can include such items as the following:</p> <ol style="list-style-type: none"> <li>1. enrollment</li> <li>2. grade level</li> <li>3. attendance and tardiness patterns</li> <li>4. ethnicity</li> <li>5. gender</li> <li>6. home background</li> <li>7. language proficiency</li> <li>8. mobility rate</li> <li>9. disability type or health needs</li> <li>10. socio-economic status</li> </ol> <p>Information about the parents and community can include:</p> <ol style="list-style-type: none"> <li>1. parent and community involvement</li> <li>2. percentage of residents with school-age children</li> <li>3. economic conditions</li> <li>4. level of education</li> <li>5. ethnicity</li> <li>6. organizations availability and capacity to support education</li> </ol> <p>A useful school demographic profile will also include accurate and thorough information about the staff. This also includes, but is not limited to the following:</p> <ol style="list-style-type: none"> <li>1. number of employees in all employee categories</li> <li>2. years of experience</li> <li>3. preparation and advanced degrees</li> <li>4. age</li> <li>5. mobility</li> <li>6. gender</li> <li>7. ethnicity</li> <li>8. language proficiency</li> </ol>

Organizational Data	Stakeholder Data
<ol style="list-style-type: none"> <li>1. curriculum maps, unit designs, and pacing guides</li> <li>2. staffing information (all employee groups)</li> <li>3. budget information</li> <li>4. professional development initiatives</li> <li>5. classroom practices inventories</li> <li>6. interventions and services inventory</li> <li>7. facilities inventory</li> <li>8. mission, vision, beliefs, and values</li> <li>9. strategic goals and plans</li> <li>10. resources inventory</li> <li>11. communication practices</li> <li>12. walkthrough and teacher observation data</li> </ol>	<ol style="list-style-type: none"> <li>1. perceptions inventories related to parents, community, students, and teachers can include:</li> <li>2. value of the educational program</li> <li>3. expectations and satisfaction related to . . . achievement, school facilities, accessibility to resources, safe and effective environment</li> <li>4. student morale inventory</li> <li>5. teacher morale inventory</li> <li>6. leadership credibility inventory</li> <li>7. satisfaction related to professional development</li> </ol>

Graphic Representations of Data	Color-coding or Highlighting								
<ol style="list-style-type: none"> <li>1. <b>Pie charts</b> are best used to display parts or portions of the whole. Try not to use more than six segments. They do not show changes over time.</li> <li>2. <b>Bar graphs</b> are used to compare things between different groups or to track changes over time. However, when trying to measure change over time, bar graphs are best when the changes are larger.</li> <li>3. <b>Line graphs</b> are used to track changes over short and long periods of time. When smaller changes exist, line graphs are better to use than bar graphs. Line graphs can also be used to compare changes over the same period of time for more than one group. They enable the viewer to make projections related to trends and patterns.</li> <li>4. <b>Scatter plots</b> are used to show how much one variable is affected by another variable and usually consist of a large body of data. The closer the data points come to making a straight line, the higher the correlation between the two variables or the stronger the relationship. The x-axis is used to measure one event (or variable) and the y-axis is used to measure the other. If both variables increase at the same time, they have a positive relationship. If one variable decreases while the other increases, they have a negative relationship. Sometimes the variables don't follow any pattern and have no relationship.</li> </ol> <p>Darnell, B. (2002). Guide for instructional leaders: Leading instructional environment assessment. Alexandria, VA: Association for Supervision and Curriculum Development.</p>	<p>Color-coding or highlighting is used to identify areas where you are interpreting patterns, insight, trends, and other observations.</p> <table border="0"> <tr> <td>Pink</td> <td>Advanced/Above Expectations</td> </tr> <tr> <td>Green</td> <td>Proficient/Meets Expectations/At Grade Level</td> </tr> <tr> <td>Yellow</td> <td>Below Proficient/Does Not Quite Meet Expectations Needs additional intervention</td> </tr> <tr> <td>Red</td> <td>Below Expectations/Minimal Proficiency Needs substantial intervention</td> </tr> </table>	Pink	Advanced/Above Expectations	Green	Proficient/Meets Expectations/At Grade Level	Yellow	Below Proficient/Does Not Quite Meet Expectations Needs additional intervention	Red	Below Expectations/Minimal Proficiency Needs substantial intervention
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	<h3 data-bbox="922 1096 1214 1127">Types of Data Analysis</h3> <ol style="list-style-type: none"> <li>1. <b>Snapshot Analysis</b> This form of analysis focuses on the examination of the spread or distribution of the data. For example, schools may want to examine the percent of students who meet, exceed, or did not meet target standards in a curricular domain.</li> <li>2. <b>Longitudinal Analysis</b> Longitudinal analysis focuses on student achievement results over time. Schools can examine student reading performance for the last three years. They can look for trends or patterns of different groups of students for the same grade level over time or may want to examine a cohort group's progress.</li> <li>3. <b>Multiple Variable Analysis</b> This type of data analysis permits schools to examine differences among groups or variables. For example, schools can determine how students with learning disabilities performed in science compared to two years ago.</li> <li>4. <b>Interaction Analysis</b> This form of analysis is used to examine the relationship between two variables. Schools can discover if student achievement in reading increases for students who read a specified number of books or if math exam results and grade point average are related positively.</li> </ol>								

### Analyzing Data

#### Critical Questions

1. What is the whole picture?
2. What is the school doing to enable students to make progress?
3. Why is performance the way it is?

#### Focus Questions

1. What are the areas of greatest student academic needs you will focus on at the school, in your grade, department, school, and/or district?
2. What programs/processes/practices will be utilized (and what will be eliminated) in order to implement and maintain the focus?

#### Igniting and Inviting Conversations

1. Define the purpose of the meeting and communicate the time limit (40-60 minutes or less is ideal for a first session).
2. Focus on a target of student achievement and begin by asking participants to brainstorm evidence of students' strengths. Use a go-around to list the participants' responses.
3. Use the fishbone strategy (see below) to silently brainstorm factors creating low achievement. Use a go-around to list the participants' responses.
4. Identify the most influential factors in each category (curriculum, teacher, organization, learner, parent).
5. Recognize thoughtful analysis and schedule a second meeting.

### Mining Deeper: Analysis and Interpretation of Data

#### Student Achievement Data Analysis--Looking at the Data

1. What observations can we make about this data?
2. What does the "all students" data tell us?
3. What do we see when we compare scores within a subgroup?
4. What do we see when we compare scores among subgroups?
5. What do we see when we compare results among the assessments?
6. What trends do we see in this data?

#### Outcome Data Analysis--Determining What the Data Really Means

1. What data draws our attention?
2. What is unique or unexpected about the data?
3. What preliminary conclusions or generalizations can we draw about this data?
4. What questions are raised by this data?
5. What additional outcome data would we like to have?
6. What other kinds of data would we like to have?

San Diego City Schools: School Self Study Process

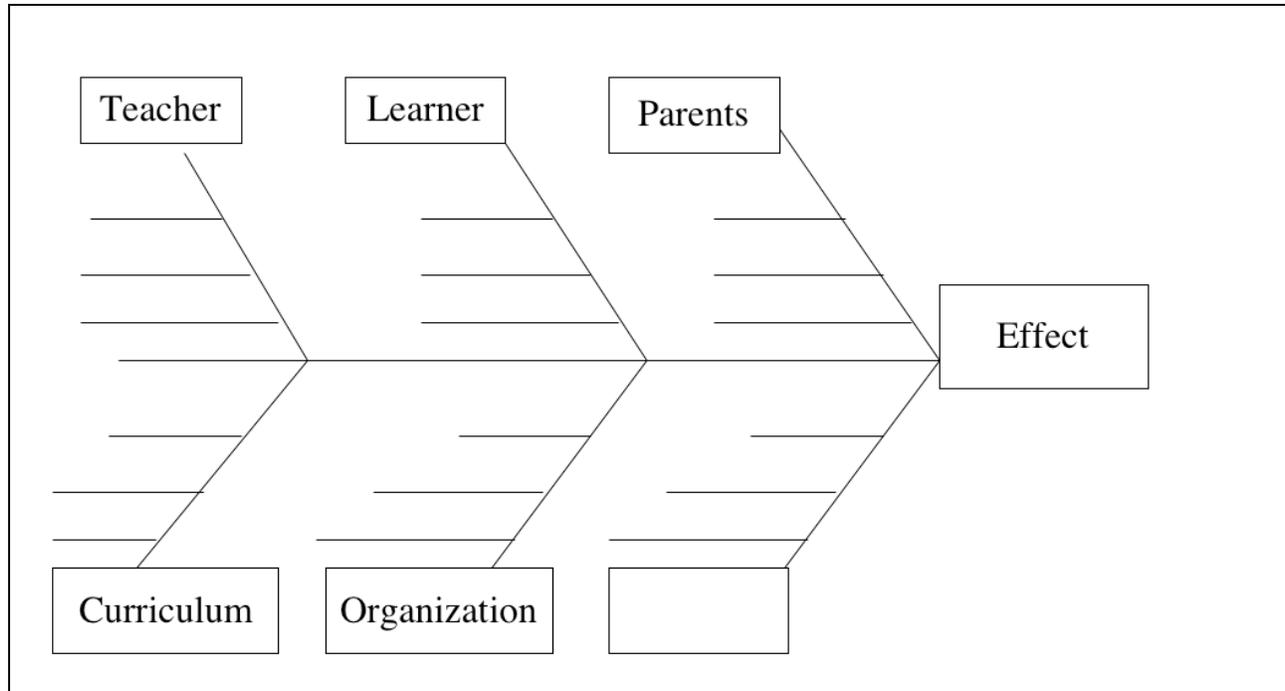
<b>Observations</b>	<b>Hypotheses</b>	<b>Connections</b>
<b>What patterns, problems, or challenges do we observe?</b>	<b>What do we do that might contribute to these patterns?</b>	<b>What could we do in the classroom or school that might improve these data?</b>

**Looking at Classroom Data**

<b>Use Assessment Results to Guide Instruction and Increase Achievement</b>
<ol style="list-style-type: none"> <li>1. Tag your assessment items and tasks to make sure that you are assessing essential content and skills comprehensively.</li> <li>2. Item analyze the assessment results to determine the strengths and needs of students related to essential content and skills.</li> <li>3. Use the assessment data to make informed decisions about subsequent spiraling of content and skills as well as re-teaching standards that have not been mastered.</li> </ol>

Learning Targets/Objectives	Type of Thinking/ Comprehension/Task	Student Results

### Fishbone Analysis: Contributing Factors



### Discovering What Is Really Going On in Reading

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. How do student outcomes differ by demographics, programs, and schools?</li> <li>2. How do the reading levels of our students compare with those of students across the state? District? Area?</li> <li>3. How many of our students read below grade level?</li> <li>4. What is the longitudinal progress of a specific cohort of students?</li> <li>5. What are the characteristics of students who achieve proficiency and of those who do not?</li> <li>6. Where are we making the most progress in closing the achievement gaps?</li> <li>7. How do absence and mobility affect assessment results?</li> <li>8. How do student grades correlate with state assessment results and other measures?</li> </ol> | <ol style="list-style-type: none"> <li>9. To what extent have specific programs, interventions, and services improved outcomes?</li> <li>10. Will improving students' reading skills positively affect their performance in classroom work?</li> <li>11. What are we doing to support accelerated growth in reading for students below grade level?</li> <li>12. What are we doing to support accelerated growth in reading for students who are performing in the average category?</li> <li>13. What are we doing to support growth in reading for students who are performing above average?</li> </ol> |
|---|--|

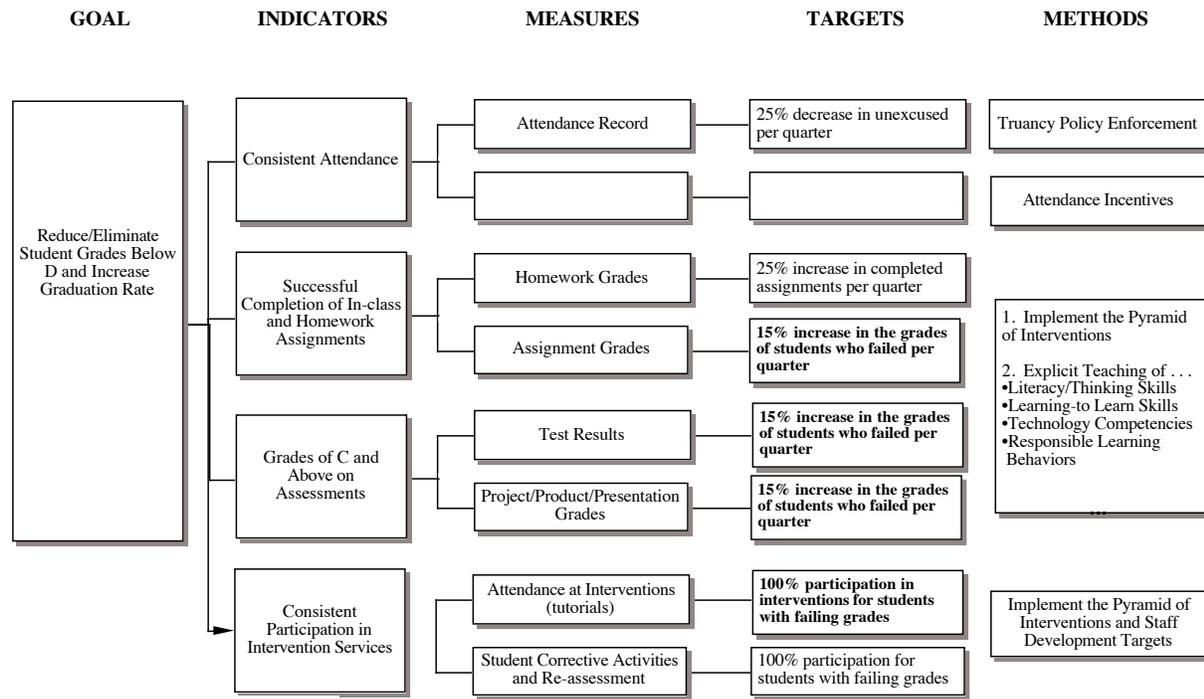
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Creating Improvement Goals and Plans

**E**stablish  
**S**MART  
**i**mprovement  
**g**oals.

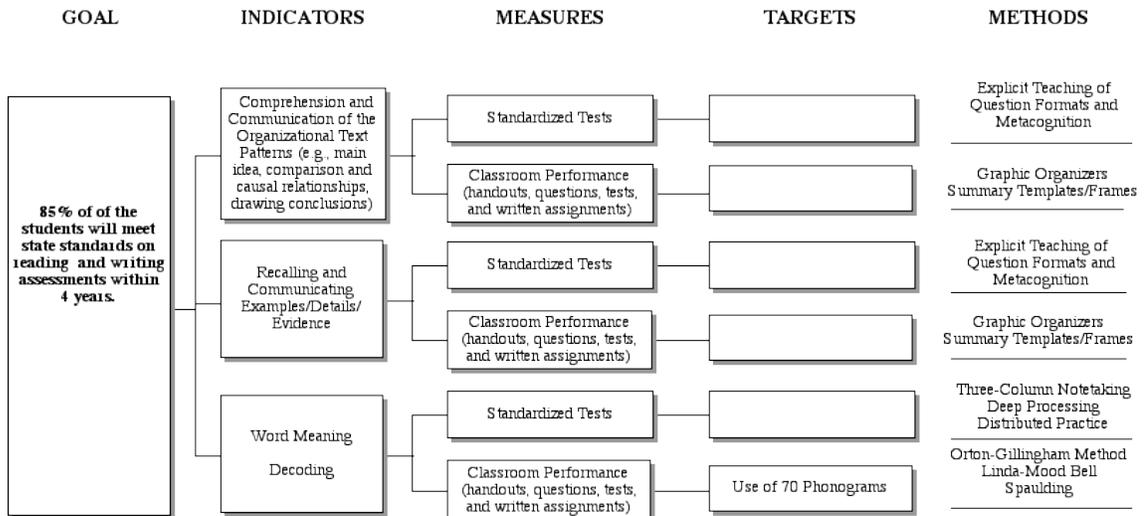
S= Strategic and Specific  
M= Measurable  
A= Attainable  
R= Results-based  
T= Time-bound  
The Power of SMART Goals: Using Goals to Improve Student Learning (O'Neill & Conzemius, 2006)

SMART Goal for Reducing/Eliminating Failing Grades



Dr. Bobb Darnell [bobbdarnell@mac.com](mailto:bobbdarnell@mac.com) 6/08

The Tree Diagram:  
Helping Teams Make Their Goals SMARTer  
Literacy SMART Goal



<b>Best-Shot Practice</b>		<b>Comments/Insights</b>
<b>Focus (In the beginning of instruction)</b>		
1. States objectives/learning goal(s)		
2. Displays objectives/learning goal(s)		
3. Engages students in noting and understanding lesson objectives		
4. Activates previous learning and builds background information and motivation to learn		
<b>Instruction (Teaching, Modeling, and Reinforcing)</b>		
5. Communicates accurate interpretation and explanation of content in an enthusiastic way		
6. Activities align to objectives		
7. Clearly communicates instructions and procedures for participating in activities		
8. Organizes and presents content and skills into small logical chunks		
9. Organizes and presents content and skills into small logical chunks (i.e., scaffolds) so that the task or content is simplified and more manageable		
10. Uses a pace that maintains attention and adapts to learners' needs		
11. Uses appropriate questions to inspire critical and/or creative thinking		
12. Uses explicit guided practice to teach skills, strategies, and processes.		
13. Encourages students to represent new content in nonlinguistic ways (e.g., graphic organizers, charts, pictures, physical movement, enactment, mental image) to reinforce learning and assess comprehension/thinking		
14. Encourages students to construct oral or written summaries to reinforce and assess new learning		
15. Encourages students to take notes on new content		
16. Teaches, models, and reinforces academic vocabulary for understanding, retention, and transfer		
<b>Interaction (During Instruction)</b>		
17. Provides opportunities to learn from and with peers effectively and efficiently with structure and process (e.g., cooperative learning, reciprocal teaching, pair-share)		
18. Engages students in oral description, discussion, elaboration, and/or prediction activities to enhance new knowledge		
19. Engages students in activities that require them to write out and represent their conclusions and understandings		
20. Uses developmentally appropriate questioning with suitable rigor		
21. Uses suitable wait time, support, and encouragement to elicit students' responses to questions		
<b>Monitor Learning (During Instruction)</b>		
22. Frequently assesses student progress after small chunks of content/skills have been presented to determine progress toward objectives, the appropriateness of the pace, and determine necessary adjustments in instruction		
23. Provides timely and specific feedback to students regarding their progress toward the learning goals		
24. Provides encouragement to students by responding to learners' needs (e.g., re-teach, clarify, extend learning, asks students to revise and correct errors) and emphasizing the importance of effort		
<b>Closure (At the End)</b>		
25. Engages students in concluding activities that require them to reflect on their own progress related to the stated learning goals, recognize and celebrate progress, and determine the need for assistance and adjustments		
26. Refers to homework and expectations for review or preparation for assignments or assessments		
<b>Behavior/Classroom Management (Classroom Environment)</b>		
27. Maintains a productive classroom environment with minimal/no disruptions		
28. Encourages students to cease disruptive behavior/misconduct using verbal and non-verbal cues		
29. Creates and maintains positive relationships with students		

Classroom Instruction Research	Interventions
<p style="text-align: right;"><b>Percentile Increase</b></p> <ol style="list-style-type: none"> <li>1. Identifying Similarities and Differences 45</li> <li>2. Summarizing and note taking 34</li> <li>3. Reinforcing effort and providing recognition 29</li> <li>4. Homework and practice 28</li> <li>5. Non-linguistic representations 27</li> <li>6. Cooperative Learning 27</li> <li>7. Setting objectives and feedback 23</li> <li>8. Generating and testing hypotheses 23</li> <li>9. Question, cues, &amp; advanced organizers 22</li> </ol> <p>Marzano, Robert, et. al. (2001)</p>	<ol style="list-style-type: none"> <li>1. One-on-one tutoring</li> <li>2. Parent training and involvement</li> <li>3. After-school program</li> <li>4. Curriculum alignment</li> <li>5. Computer-Assisted reading management Program</li> <li>6. At-home computer use</li> <li>7. Content area staff development (e.g., differentiation, assessment design, reading, writing, technology integration)</li> <li>8. Staff development for co-teachers.</li> <li>9. Coordination of teaching and support for special ed and regular ed</li> <li>10. Blocking more time for intervention programs</li> <li>11. Early intervention</li> <li>12. Appropriate formative and summative assessment of benchmark skills and strategies</li> </ol>

Research-Supported Strategies/Practices for Improving Math Problem Solving	
<ol style="list-style-type: none"> <li>1. Providing immediate feedback about progress</li> <li>2. Modeling and guided practice using tightly sequenced forms of explicit instruction</li> <li>3. Teaching and modeling the use of problem representation and problem solving strategies</li> <li>4. Small group, cooperative learning, and peer tutoring</li> <li>5. Providing teachers with regular updates on student performance in terms of state standards</li> <li>6. Teaching prerequisite skills prior to the introduction of new operations and concepts</li> <li>7. Providing direct instruction in self-monitoring procedures</li> <li>8. Using graphic organizers</li> </ol> <p>Sample Strategies 1 through 5 US Department of Education, The Use of Scientifically Based Research in Education, Working Group Conference, (2002)</p>	<ol style="list-style-type: none"> <li>9. Explicitly teaching summarizing and writing extended responses</li> <li>10. Incorporating manipulatives, concrete materials, and authentic situations</li> <li>11. Expanding math vocabulary and concept knowledge through explicit teaching (e.g., notetaking, memory and retrieval strategies, roots, prefixes, and suffixes in mathematics)</li> <li>12. Using timed math exercises that mirror state and district assessments</li> <li>13. Assuring equity of curriculum delivery and opportunity to learn math</li> <li>14. Creating opportunities for interactive classroom discussion regarding inventive and intuitive problem solving</li> <li>15. Providing opportunities to use calculators</li> <li>16. Providing computer-assisted math instruction</li> </ol> <p>Sample Strategies 6 through 16 Sources: Walberg, (1995) In Cawelti, G. Handbook of Research on Improving Student Achievement. Arlington, VA: Educational Research Service</p>

Best Practices: Comprehension Strategies		
<ol style="list-style-type: none"> <li>1. Monitoring Comprehension</li> <li>2. Metacognition</li> <li>3. Graphic and semantic organizers</li> <li>4. Answering questions</li> <li>5. Generating questions</li> <li>6. Recognizing text structure</li> </ol>	<ol style="list-style-type: none"> <li>7. Summarizing and extended written responses to reading</li> <li>8. Reciprocal teaching</li> <li>9. Cooperative learning</li> <li>10. Mental Imagery</li> </ol> <p>National Reading Panel (2000)</p>	<p><b>Explicit Guided Practice</b></p> <ul style="list-style-type: none"> <li>•I do</li> <li>•We do</li> <li>•I do</li> <li>•We do</li> <li>•I do</li> <li>•You do</li> </ul> <ul style="list-style-type: none"> <li>•Reflection</li> <li>•Additional Practice</li> </ul>

<b>5</b>	<b>Preparing to Implement a Plan</b>
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What works in staff development?	Professional Development Delivery Systems	
<ul style="list-style-type: none"> <li>•Results-driven</li> <li>•Standards-based</li> <li>•Job-embedded</li> <li>•Content rich</li> <li>•Entire school</li> <li>•Differentiated for grade, content, experience, etc.</li> </ul> <ol style="list-style-type: none"> <li>1. Create and maintain on-going programs.</li> <li>2. Use time for knowledge acquisition and guided practice for skill development.</li> <li>3. Provide coaching (peer and supervisor).</li> <li>4. Create usable products with job-alikes.</li> <li>5. Increase access to colleagues.</li> <li>6. Recognize and support implementation and progress.</li> <li>7. Staff choose personal learning goals.</li> <li>8. Link programs to personal needs and school improvement goals.</li> <li>9. Build in monitoring/evaluation.               <ul style="list-style-type: none"> <li>•program evaluation</li> <li>•self-assessment</li> <li>•department head/supervisor coaching</li> </ul> </li> </ol>	<ul style="list-style-type: none"> <li>•action research</li> <li>•assessment</li> <li>•case studies</li> <li>•critical friend group</li> <li>•curriculum development</li> <li>•data for analyzing schools</li> <li>•examining student work</li> <li>•journaling</li> <li>•immersion</li> <li>•lesson study</li> <li>•listening to students</li> <li>•mentoring</li> </ul>	<ul style="list-style-type: none"> <li>•networks</li> <li>•peer coaching</li> <li>•portfolios</li> <li>•school coaching</li> <li>•shadowing students</li> <li>•study groups</li> <li>•training of trainers</li> <li>•tuning protocols</li> <li>•walk-throughs</li> <li>•training on specific strategies and approaches</li> </ul> <p>Journal of Staff Development on Powerful Designs-- Summer 1999.</p> <p>Powerful Designs. Fall 2003.</p>

Our team/department/school needs to learn/do to prepare for improving student learning . . .	I need to learn . . .

### Professional Needs Assessment

Area of Focus	Our department team would like to collaboratively work to , , ,
<b>Curriculum and Unit Design</b>	<ol style="list-style-type: none"> <li>1. Create unit objectives for upcoming units.</li> <li>2. Examine previously written objectives and determine their depth, variety, and comprehensiveness.</li> <li>3. Review, create, or modify curriculum maps.</li> </ol>
<b>Assessment</b>	<ol style="list-style-type: none"> <li>4. Create a rubric for a performance, product, or task.</li> <li>5. Examine a previously written test and tag the items with the unit objectives.</li> <li>6. Create a test directly based upon the importance of the objectives and their emphasis during instruction.</li> <li>7. Review a test to determine how effective it is for measuring students' strengths and learning needs. Make necessary or desired changes.</li> <li>8. Create an assessment plan for an upcoming unit identifying types, frequency, and placement of assessments.</li> </ol>
<b>Academic Interventions</b>	<ol style="list-style-type: none"> <li>9. Create corrective activities that respond to students' learning needs for upcoming units.</li> <li>10. Create enrichment activities that respond to students' mastery of tested materials and need for extension.</li> <li>11. Create alternative assessments to use for reassessing student learning.</li> <li>12. Create a program to address failing students and underachievers.</li> </ol>
<b>Instruction</b>	<ol style="list-style-type: none"> <li>13. Create lessons using new strategies to improve student learning.</li> <li>14. Create instructional resource materials to be used during the implementation of new strategies and practices.</li> <li>15. Create lessons resources to increase the achievement of special needs students (i.e., special education, ELL, and at-risk students).</li> </ol>
<b>Explicit Vocabulary Instruction</b>	<ol style="list-style-type: none"> <li>16. List vocabulary words that are important for students to know for each unit of study.</li> <li>17. Create a list of "no excuse" words that students must know by the end of the course.</li> </ol>
<b>Explicit Reading, Writing, and Thinking Instruction</b>	<ol style="list-style-type: none"> <li>18. Select graphic organizers that match the type of thinking/comprehension you expect from students and plan lessons to place in the unit instruction.</li> <li>19. Create exemplars of graphic organizers for upcoming units that you will use to teach, model, and reinforce thinking/comprehension and content concurrently.</li> <li>20. Select summary frames that match the type of thinking/comprehension you expect from students and plan lessons to place in the unit instruction.</li> <li>21. Create exemplars of summaries for upcoming units that you will use to teach, model, and reinforce thinking/comprehension and content concurrently.</li> </ol>
<b>Learning Environment</b>	<ol style="list-style-type: none"> <li>22. Develop behavior management systems and strategies.</li> <li>23. Apply problem-solving strategies to address inappropriate student behaviors</li> </ol>
<b>Data Analysis, Goal Setting, and Planning</b>	<ol style="list-style-type: none"> <li>24. Examine student work and/or achievement data and identify the greatest areas of student learning needs.</li> <li>25. Create a 30-60 day SMART goal to increase student learning.</li> <li>26. Explore research-supported and classroom-testing practices/strategies that could address the student learning needs.</li> <li>27. Create a plan for taking decisive new actions and/or for implementing new practices.</li> <li>28. Review the implementation of new practices, determine the impact on student learning, and identify what your professional team has learned.</li> </ol>
<b>PD to Specific Topics</b>	29. Learn about _____ from _____ (Please list and describe.)
<b>We Need . . .</b>	30. (Please list and describe.)

<b>6</b>	<b>Implementing Improvement Initiatives, Monitoring Progress, and Making Adjustments</b>
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**REFLECT**

<p><b>1. Talking about Planned and Delivered Curriculum Content and Topics</b></p> <ol style="list-style-type: none"> <li>1. What planned <u>content and topics</u> were <b>omitted/abandoned</b> during the delivery of the chapter/unit of study?</li> <li>2. What content and topics were <b>added</b> during the delivery of the chapter/unit of study?</li> <li>3. What were students' <b>strengths</b> related to the content and topics?</li> <li>4. What content and topics were challenging for students and will be <b>needed for subsequent learning</b>?</li> <li>5. What will you do to <b>re-teach or review</b> the content and topics identified in #4?</li> </ol>
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<p><b>2. Talking about Instructional Best Practices and Strategies</b></p> <ol style="list-style-type: none"> <li>1. What instructional practices, strategies, and/or techniques <b>engaged</b> students and <b>facilitated achievement</b> of stated learning goals?</li> <li>2. What instructional practices, strategies, and/or techniques <b>did not engage</b> students and <b>did not facilitate achievement</b> of stated learning goals?</li> <li>3. What do you need to learn (e.g., strategies, practices, techniques) to increase student engagement and/or learning?</li> </ol>
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<p><b>3. Talking about Assessing Student Progress</b></p> <ol style="list-style-type: none"> <li>1. What types of formative assessments do you use and how frequently?</li> <li>2. What types of summative assessments do you use to assess students end-of-unit/chapter progress?</li> <li>3. How do you analyze students' performance after assessments?</li> <li>4. How do you provide students with feedback about their performance?</li> <li>5. What targeted skills and/or knowledge are challenging for students?</li> <li>6. What do you need or want to learn how to do related to assessing student learning?</li> </ol>
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<p><b>4. Igniting and Inviting Data Conversations to Determine---Why is performance the way it is?</b></p>	
<ol style="list-style-type: none"> <li>1. Do I teach it?</li> <li>2. Do I teach it the way it is tested on classroom and external assessments?</li> <li>3. Do I teach it to the same depth that it is tested?</li> <li>4. Do I place it in the right sequence?</li> </ol>	<ol style="list-style-type: none"> <li>5. Do I teach it frequently enough?</li> <li>6. Do I teach it for the appropriate duration?</li> <li>7. Do I use the best (i.e., research-supported) practices or strategies?</li> </ol>

<p><b>5. Talking about New Innovations and Initiatives at the School</b></p>			
<ol style="list-style-type: none"> <li>1. What <b>CONCERNS</b> do you have about _____?</li> </ol>	<ol style="list-style-type: none"> <li>2. What <b>QUESTIONS</b> do you have about _____?</li> </ol>	<ol style="list-style-type: none"> <li>3. What positive results do you <b>HOPE</b> _____ brings?</li> </ol>	<ol style="list-style-type: none"> <li>4. What do you <b>NEED</b> to help you and/or your colleagues get ready for _____?</li> </ol>

**Student Work Gallery 1:  
Looking At Student Work**

View the student work of your colleagues for 3 minutes.

1. What were the qualities of student work that made it an excellent product? (1 minute per participant)
2. What is an insight you gained about the student work you brought? (1 minute per participant)
3. What did you learn or what insights did you gain from looking at student work? (1 minute per participant)

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**Student Work Gallery 2:  
Looking At Student Work**

View the student work of your colleagues for 3 minutes.

1. What do you wonder about or what questions does the work your colleagues brought raise for you? (1 minute of uninterrupted time per participant)
2. What will you do differently or what change in practice will you make to improve student skills related to the use of specific graphic organizers and summaries? (1 minute of uninterrupted time per participant)

**Success Analysis Activity  
(2 minutes of uninterrupted time for each person to speak about questions 1-3)**

1. The purpose of the lesson was to have students acquire the following concepts and skills.
2. During the time when the students were completing their graphic organizers and/or summaries, I observed the following . . . (e.g., engagement, understanding, behavior)

Use the student work you brought to illustrate the progress and challenges, and achievement gaps evident in the student work.

3. In what way(s) is the quality of this work different from the first samples you saw at the beginning of the reading/thinking improvement initiative? What promising results are you witnessing?

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**Problem/Dilemma Protocol**

1. Each participant in the trio takes 1 minute to review the poorest quality work that they brought with them or others that they recall from their students. They complete the following sentence

A problem that students continue to illustrate in their graphic organizers or summaries is . . .

2. Each person presents his/her dilemma for one minute.
3. Group members listen and ask questions or make suggestions about the problem/dilemma.
4. The person who originally presented their dilemma then finishes the sentence below.

An action that I can/will take to increase students achievement related to reading, writing, and thinking will be to . . .

5. Repeat 1-4 for each of the 3 group members.

### Concerns-Based Adoption Model (CBAM)

- Concerns** Feelings, reactions, attitudes (not necessarily anxieties, worries, or fears)
- Innovation** Any program, product, or process new to the individual
- Intervention** An action or event that influences the use of an innovation
- Facilitator** Anyone who has some responsibility for helping people change and for creating a context to support change.

#### Stages of Concern      Expressions of Concern

- |    |               |  |
|----|---------------|--|
| 6. | Refocusing    | I have some ideas about something that would work even better.             |
| 5. | Collaboration | How can I relate what I am doing to what others are doing?                 |
| 4. | Consequence   | How is my use affecting students? How can I refine it to have more impact? |
| 3. | Management    | I seem to be spending all my time getting materials ready.                 |
| 2. | Personal      | How will using it affect me?   |
| 1. | Informational | I would like to know more about it.  |
| 0. | Awareness     | I am not concerned about it.   |

INTERVENTIONS must be related to:

- The people first
- The innovation second

### Finding Out What is Going on With Changes

1. What <b>CONCERNS</b> do you have about _____?	2. What <b>QUESTIONS</b> do you have about _____?	3. What positive results do you <b>HOPE</b> _____ brings?	4. What do you <b>NEED</b> to help you and/or your colleagues get ready for _____?
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### CBAM Levels of Use

0	Non-use	Having little or no knowledge of the innovation
1	Orientation	Acquiring some information of the innovation
2	Preparation	Preparing for the first use of the innovation
3	Mechanical Use	Focusing on immediate needs of the user to master tasks of the innovation
4A	Routine	Making few changes of the ongoing use of the innovation
4B	Refinement	Varying use of the innovation to make an impact on students
5	Integration	Combining efforts of self and colleagues to achieve collective impact on students
6	Renewal	Reevaluating own use, seeking major modifications, and exploring new developments

Hord, S., Rutherford, W., Hulling-Austin, I., Hall, G. (1987). Taking charge of change. Alexandria, VA: ASCD

<b>7</b>	<b>Evaluating Progress</b>
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### Assessing the Impact of Professional Development

Types of Change for Students and Teachers	Definition
<b>Knowledge (understand)</b>	Conceptual understanding of information, theories, principles, and research
<b>Attitude (believe)</b>	Beliefs about the value of particular information or strategies.
<b>Skills (employ)</b>	Strategies and processes to apply knowledge
<b>Aspiration (desire)</b>	Desires, or internal motivation, to engage in a particular practice
<b>Behavior (behave regularly)</b>	Consistent application of knowledge and skills

Source: Killion, Joellen. *Assessing Impact: Evaluating Staff Development 2002*. Oxford: Ohio, NSDC.

<b>IDEAL Problem Solving</b>	
<p><b>I</b> dentify the dimensions of the problem.</p> <p><b>D</b> etermine alternative solutions.</p> <p><b>E</b> stablish standards and evaluate each alternative solution.</p> <p><b>A</b> dopt and implement a plan.</p> <p><b>L</b> ook back, evaluate, and adjust.</p>	<ol style="list-style-type: none"> <li>1. (I) Identify the problem that needs to be solved.</li> <li>2. (I) What are the causes of this problem?</li> <li>3. (I) What positive results do you expect will occur when you solve this problem?</li> <li>4. (D) What are some possible ways to solve this problem?</li> <li>5. (E) Which alternative solution(s) do you choose to solve the problem?</li> <li>6. (A) What obstacles, if any, do you have to overcome in order to solve this problem?</li> <li>7. (A) What is your plan for applying the solution you chose?</li> <li>8. (L) Do you predict that this plan will work? Why?</li> <li>9. (L) When will you evaluate your solution strategy to make sure it is working?</li> </ol>

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### Customize Recognition of Progress and “Radically Celebrate”

<ol style="list-style-type: none"> <li>1. Look colleagues in the eye and say thank you.</li> <li>2. Listen to your colleague with sincere intention.</li> <li>3. Shake hands, give high fives, or thumbs up.</li> <li>4. Be accessible and pay attention to colleagues.</li> <li>5. Tell colleagues about additional training and conferences and advocate for support.</li> <li>6. Close meetings by noting progress.</li> <li>7. Link recognition to bigger organization and unit department goals.</li> <li>8. Be specific about why you are recognizing each other.</li> <li>9. Recognize in a timely fashion.</li> <li>10. Follow up group recognition with individual recognition.</li> <li>11. Diversity recognition.</li> <li>12. Recognize the behind the scenes people too (e.g., secretaries, mail person, etc.)</li> <li>13. Write the word recognition in your calendar every day and act on it.</li> <li>14. Give certificates of recognition.</li> </ol>	<ol style="list-style-type: none"> <li>15. Bring visiting teachers to meet colleagues.</li> <li>16. Leave recognition voice mails.</li> <li>17. Tell someone how proud you are of him/her.</li> <li>18. Post positive results (e.g., charts, graphs, other work).</li> <li>19. Send an email recognition and copy everyone in the department.</li> <li>20. Ask positive performers to be mentors.</li> <li>21. Keep a supply of "thank you, you did a good job" notes on hand and distribute them accordingly.</li> <li>22. Ask colleagues what they think. Ask for advice about a new program or idea you are thinking about.</li> <li>23. Send an e-card to recognize accomplishment.</li> <li>24. Help a colleague on a big project.</li> <li>25. Ask colleagues to be in charge of something.</li> <li>26. Give a paid subscription to a professional magazine or membership.</li> </ol>
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