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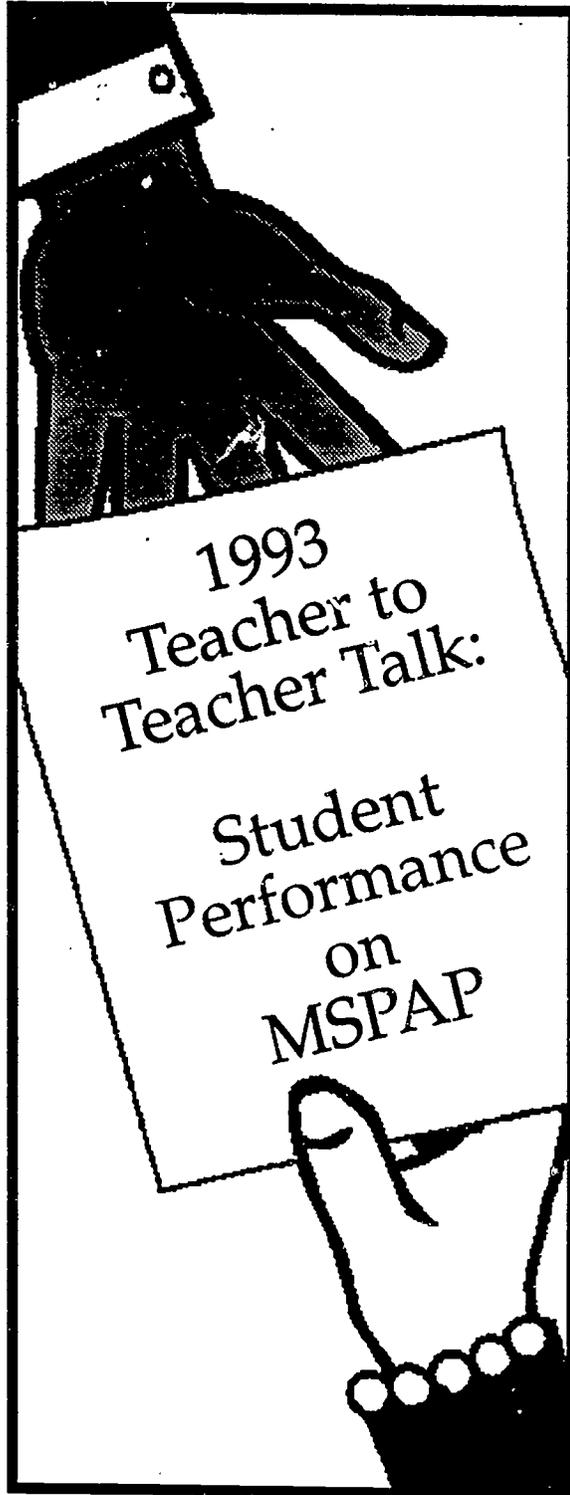
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ABSTRACT

This document offers many of the insights and comments of Maryland elementary school teachers who scored the 1993 Maryland School Performance Assessment Program (MSPAP) tests. The MSPAP covers reading, writing, social studies, mathematics, and science and is administered to Maryland students in grades 3, 5, and 8. Comments and observations are organized by content areas in two sections: "Perceptions" (impressions respondents would like to share with other teachers about student performance); and "Actions" (what the teacher anticipates doing differently based on his/her impressions from scoring the tests). Each entry is followed by grade level, in parentheses, identifying the grade level responses that were scored by the teacher who provided the comment. However, most comments are relevant to teachers across grade levels. Some general perceptions included: understanding multi-task directions was problematic; children need to be taught to be more specific and to think; and many students were nervous or frightened. Some general actions teachers intended to take based on their experience scoring tests were to seek opportunities for students to discuss and evaluate situations and arrive at conclusions, to teach test-taking skills, and to get a list of outcomes MSPAP is measuring. An appendix contains a copy of the form that solicited teacher's comments. (JB)

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INTRODUCTION

These days, more and more teachers are talking about *Teacher to Teacher Talk*, the collection of feedback from teachers who scored the Maryland School Performance (MSPAP) tests during the summer of 1992. By discussing, reflecting upon, and acting upon some of these observations and recommendations, they have taken important steps towards improving teaching and learning in Maryland. In order to build upon these steps and to continue local and state school improvement efforts, we have prepared a 1993 edition of *Teacher to Teacher Talk*.

Once again, this past summer, over six hundred teachers met at one of four schools around the state to score student responses to MSPAP. Working in teams to score tasks in one or more content areas, they had the opportunity to share observations, concerns and good ideas for ways to extend to schools and classrooms what they learned from the scoring experience. When these teachers were given the opportunity to share their insights with others, the response was outstanding. Hundreds of scorers took the time to respond to the *Teacher to Teacher Talk* questionnaire (see Appendix A) by addressing two key questions:

1. On the basis of our experience scoring MSPAP, what are a few impressions that you would most like to share with other teachers about student performance?
2. Based on those impressions, what do you anticipate doing (or doing differently) in your classroom or school?

All of the responses were read by a team of teachers, specialists, and content area supervisors, who selected from among them the most salient and best expressed observations and recommendations. These have been organized in the following pages by content areas in two sections: **Perceptions** (responses to question #1) and **Actions** (responses to question #2). Many comments cross content areas however, and you may find it very useful to read *1993 Teacher to Teacher Talk* in its entirety. You will note that each entry is followed by a grade level in parentheses. This identifies the grade level MSPAP responses that were scored by the teacher who provided that comment. However, the vast majority of comments are relevant to teachers across grade levels. The designation of n.g. means that the teacher failed to indicate the grade level team on which he or she served.

It is important to remember that the feedback in *1993 Teacher to Teacher Talk* reflects what the teachers themselves chose to share with others. Not all Maryland Learning Outcomes are addressed in their observations, and some outcomes appear more heavily weighted than others. Similarly, many observations address fairly basic skills rather than more complex thinking. Merely addressing the deficits identified by this team of teacher-scorers will not get us to where we want to be by the year 2000; nevertheless, when this information is used in concert with other sources of information available to your schools and school systems, we believe it can help considerably in moving towards those goals.

It is hoped that *1993 Teacher to Teacher Talk* will be useful to you as you work to extend what your students understand and can do. Some ways you might consider using this information include viewing it as an additional tool to help you identify strengths and weaknesses in your students' learning. This information, as well as other information only you know about your own students, will help you to identify specific content area outcomes that need more attention in the classroom. Armed with that information, more effective curriculum development, lesson planning, and development of classroom assessment may follow. Another way you might use this information is as a basis for discussion within your team, department, and/or building faculty. The richest educational experiences often develop from discussion with your colleagues of what's best for instruction. In whatever ways you decide to use this document, we believe you will find it helpful to both you and the students you teach.

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Deborah Batchelor, Social Studies teacher
Baltimore City

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Charles County

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Frederick County

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PERCEPTIONS

GENERAL

Note: The following comments are not discipline specific, even though they were based on teachers' experiences scoring tasks in particular content areas. Some comments are related to students test-taking behaviors, some relate to skills, processes, and abilities that go across disciplines, and others reflect integrative thinking and learning.

- *One problem area is understanding multi-task directions. (n.g.)*
- *Basically, I think we need to teach children to be more specific and to think. I also feel that in our classrooms we are too forgiving in giving grades. We tend to overlook inaccuracies as long as the child "tries." MSPAP scoring is more demanding since decisions about credit are made based on evidence that an outcome has been attained. (n.g.)*
- *Children need to learn to answer the question asked. (Grade 3)*
- *Students seemed to have a problem with transfer or carry over tasks (those that require that they think about and act upon a previous response). (Grade 3)*
- *Most children are answering questions with complete sentences. That's great. (Grade 3)*
- *Many of the students were nervous and scared. We should prepare them, yet let them know it is going to be fun. The teacher's attitude is reflected in the children's feelings toward this test! (Grade 3)*
- *Some students were very creative in coming up with answers that demonstrated outcomes which test writers did not intend to measure. That is, their work went beyond what was expected or what was supposed to be assessed. (Grade 3)*
- *Most children attempted every task. The effort was greatly improved this year. (Grade 3)*
- *Students generally appear to need more practice developing ideas. Many students responded with a list rather than with several ideas which were well developed. (Grade 3)*
- *Maryland students are creative problem-solvers who don't give up easily if they're unsure of what a question is asking of them. (Grade 5)*

- *After scoring last year, I found many students did not know how to read or respond to questions. I am generally pleased this year to see an improvement in the students' ability to examine test questions and respond to the various components of the questions. It is very obvious to me that overall teachers are beginning to teach students how to think. (Grade 5)*
- *It is obvious that classroom teachers still need to do more frequent team/group work with students throughout the school year in all subject areas. Some students even indicated that MSPAP testing was the only time they worked with equipment in a team approach, problem solving experience. It's sad when some students thank you for a "fun experience" with a hands-on activity and then wish that Ms. _____ would have more of these experiences in her classroom. (Grade 5)*
- *Students need to proofread every answer. Each answer should make sense and be complete. (Grade 5)*
- *Children seemed to have a great deal of difficulty using one set of information to answer several questions. They tended to treat each question individually. (Grade 5)*
- *Unless we teach students to think for themselves and solve their own problems, they will continue to seek others to do for them throughout their lives. (Grade 5)*
- *Students need to refer back to the resource book as much as possible when writing their answers. (Grade 5)*
- *Interest and enthusiasm are high in project, hands-on types of activities; an "involve me" style of learning makes a difference for kids. (Grade 5)*
- *Students exhibited a primary lack of ability to think and reason rather than behaving like little "xerox machines." (Grade 5)*
- *Students need more instruction on how to read a given question and answer the question asked, interpreting it correctly. For example, if a list of ten basic civil rights is given and students are asked to identify five others that were not stated, then they should not repeat the same ones that were stated in the text. If five of the ten were illustrated and students are asked to illustrate one of the remaining five, then they should neither repeat one of the given illustrations or illustrate a right which was not mentioned in the text. (Grade 5)*
- *More emphasis on deciphering questions should be given. (Grade 5)*
- *Students need to practice expanding their answers with more details from text related materials, personal experience, or prior knowledge. (Grade 5)*

- Often students added the comment that there was insufficient time, but many wrote more than was called for, or repeated the same statement 2 or 3 times. (Grade 8)
- The most troublesome observation that I have made is that students have a very negative outlook on the future of the world. This negative outlook could manifest itself in two basic ways: (1) It could prompt them to act, or (2) It could give them a feeling of hopelessness and they will soon develop a "what's the point" attitude. As we teach our children the dangers of AIDS, the perils of the environment, etc., we must temper it with hope. We need to spark them into action, not help them develop a feeling of hopelessness. It frightens me that by only the 8th grade they already have such a negative outlook!!! (Grade 8)
- Group work is great, but everyone in each group needs to understand what's going on and why it's going on. Many students go blank when they need to draw conclusions from previously done group work - even to the point where they say, "I have no idea how my group got this." (Grade 8)
- Students generally seem to lack the ability to attend to details and describe a process they have followed that involved several steps. (Grade 8)
- This year, as opposed to last, students made more attempts to respond to activities and wrote fewer nonsense ramblings. When responses were wrong, they were usually way off target and often didn't address the question. (Grade 8)
- We must tell our students, "If you don't understand - Don't give up!" (Grade 8)
- Questions with 2, 3, 4, or 5 different parts to answer give a lot of the students trouble. They will answer the first part beautifully, but they won't answer the second part well or not at all in many cases. (Grade 8)
- Some students - as indicated by their answers - refuse to see other's points of view - no compromise on their part - this is not a good "path" to follow for obvious reasons. (Grade 8)
- Some students got lost or played up the "cutie" parts of the test. Thus, some details intended to provide an authentic context or promote interest became a distractor and the primary focus of their response. (Grade 8)
- More emphasis on careful reading of QUESTIONS, as well as instructions, could easily benefit any student at any level in any subject. (Grade 8)

READING

- *Most students can read well enough to attempt the tasks and their answers show that they usually understand the tasks. (n.g.)*
- *Teachers often use the strategy of underlining important information in the directions of a given assignment. Such a strategy can be detrimental to those preparing for the MSPAP where no key words are underlined. Further, directions are often a paragraph or more long. Students must be able to decipher not only the answer, but the question. (n.g.)*
- *Students have trouble with identifying character traits and events that show traits. (Grade 3)*
- *We need to concentrate on having the children decide what a good title or heading for a selection would be. They sometimes give reasons from the selection, not the main idea from the selection. (Grade 3)*
- *Kids need practice thinking about the illustrations and responding to them. (Grade 3)*
- *Emphasize that students need to include more than one example in answers to questions asking for such things as ideas or ways something is done. Teach students to look for plurals in directions. Give further practice in recognizing the main idea. (Grade 3)*
- *Students do not revisit text, but give their own ideas without needed text support. (Grade 5)*
- *For the most part, students this year seemed to do a better job of reading the directions and responding accordingly. Students generally, are not using specific details from the text to support their answers. (Grade 5)*
- *Most students did a good job identifying story elements. When students elected to draw their responses and did not label, full credit could not be given because their examples/ideas were not sufficiently clear. (Grade 5)*
- *Students need practice in using 2 or 3 different text sources to help them make some generalizations. (Grade 5)*
- *Though I am sure most teachers are already doing it, students must be encouraged more to read and re-read. Many appear to read the assignments in the Student Resource Guides once and then use that one reading as the basis for their responses without going back to the text(s). (Grade 5)*

- *Students need more practice in interpretation of literature - "evidence" doesn't only mean "I saw it written in the book." (Grade 5)*
- *Students are not reading the whole questions or the reading selections carefully. Therefore, they miss many points. In addition, students seem unable to explain their answers using information from the text. Many students attempted to explain their answers but did not get credit because their responses gave no evidence of constructing meaning from the text. (Grade 5)*
- *The most glaring thing I've noticed is the inability to draw specifics from the text. As teachers, we must continue making students aware just what "specifics" are and what it means to get support from the text. (Grade 5)*
- *Students need practice with comparing and contrasting, i.e., what makes a group/individual different from one another? (Grade 5)*
- *Teachers should explain what mood and feeling are. (Grade 5)*
- *The lack of ability to obtain and use information from observing, listening and reading - "extension of ideas" - is often evident. (Grade 8)*
- *The students also don't deal well with predicting the ending of the story. (Grade 8)*
- *Students need to work on relating illustrations to content and on relating personal experiences to information in content. (Grade 8)*
- *Many students aren't being critical readers and aren't following the directions precisely. (Grade 8)*
- *Most students are doing well in the literature section when writing a plot summary and the comparative character assignment. (Grade 8)*
- *Students seem to have the most difficulty when asked to interpret materials or information and to formulate conclusions about what they've read. (Grade 8)*

WRITING/LANGUAGE IN USE

- *Students need more training in proofreading rough drafts. (Grade 3)*
- *Students often use run-on sentences. Too many of their ideas are presented without good structure/punctuation. (Grade 3)*
- *Students generally were able to respond to writing prompts as asked. Some attention should be paid to teaching the different formats, i.e., for a letter - heading, closing; plays - character parts, narration, etc. (Grade 3)*
- *Encourage the use of "risk" words in writing. That is, encourage students to select and use more descriptive and expressive words, even though they may misspell them, instead of only sticking to simple vocabulary that "plays it safe" but may not be as expressive or effective in terms of word choice. (Grade 3)*
- *Most students had poor organization on writing to inform pieces - lots of extraneous information. (Grade 3)*
- *We as teachers need to point out to students that when a question asks for "ideas" or "things" they need to give more than one example. (Grade 3)*
- *Some of the common problems that I've seen in the students' language usage are: improper use of "there", "their", and "they're"; forgetting the apostrophe in contractions; run-on sentences; and forgetting question marks at the end of questions. (Grade 3)*
- *Students need exposure to plays and practice writing them. (Grade 3)*
- *Children need to understand the difference between journal or free writing and writing to answer questions. (Grade 3)*
- *Students demonstrate weakness in the following areas:*
 - ~ *capitalization — especially at the beginnings of sentences*
 - ~ *punctuation — periods and question marks*
 - ~ *following directions — students fail to answer the questions asked*
 - ~ *story development — beginnings, middle, end*
 - ~ *support responses — I agree because...*
 - ~ *complete sentences - not just list of answers (Grade 3)*
- *Teachers should encourage students to write - the more the better. (Grade 3)*

- *Students need to distinguish between narrative and expository writing. They also must be able to transfer information from a graphic organizer into paragraph form. (Grade 5)*
- *I observed inappropriate use of the word "like." (Grade 5)*
- *Students are having problems with the correct use of words like there-their, to-two-too, your-you're. (Grade 5)*
- *Word choice, usage, and writing style need improvement. Students need to realize that writing to inform, persuade, entertain, etc., are very different skills. (Grade 5)*
- *The use of contractions and the placement of the apostrophe is also poorly done. (Grade 5)*
- *Many students are using slang and regional phrases in formal writing and putting in apostrophes to do so: i.e., "because" becomes 'cause, "running" becomes runnin'. (Grade 5)*
- *It seems that many students do not really know what revising a rough draft means. Some drafts were inadvertently left in the booklets, and it was easy to see that all the students did was copy the rough draft neatly into the answer booklet. The drafts showed no evidence of crossing out words, changing spelling, fixing up sentence structure, etc. (Grade 5)*
- *The peer response part of the booklet was very good (idea-wise) as was the proofreading guide sheet. However, it appeared many did not utilize either. (Grade 5)*
- *Almost every student attempts the creative writing task with some success, and this is probably directly related to the fact that the task allows great latitude and choice on the writer's part. Some students need to be much more familiar with poetry before they attempt that format for creative writing. Although there have been some excellent poems read this year, the usual poem is written by the unmotivated student looking for a short task that does not demonstrate their best writing. (Grade 8)*
- *They are writing with more description this year. (Grade 8)*
- *I've observed the general inability to take another's words and paraphrase - many students end up copying word for word from the source of their information when they write. (Grade 8)*
- *The writing was often interesting and thoughtful. (Grade 8)*

- *Students are clearly beginning to use graphic organizers. Quite a few of them think they are ends in themselves, however. (Grade 8)*
- *Every class should be making students aware of their spelling, or they will never improve. (Grade 8)*
- *Students need to be encouraged not to rush through work. They often don't pay attention to the symbols that warn them their response will be graded for writing, and they rush through the shorter pieces. (Grade 8)*
- *I observed many spelling errors that resulted from carelessness, especially those errors that could be corrected by reading the activity. (Grade 8)*
- *A lot of low LU scores are because of careless punctuation mistakes, like not putting a period at the end of the sentence. (Grade 8)*
- *The students' spelling and punctuation alone can inhibit communication to the point where all meaning is completely lost. (Grade 8)*

MATHEMATICS

- *Many students were unable to define "least likely" even though it is in bold type. (n.g.)*
- *Students need to be able to explain why and how answers are arrived at. It is not acceptable of any level to say "I guessed" or "I tried my best." (n.g.)*
- *Students' reasoning skills are weak so that even though they may recognize patterns they are unable to demonstrate effectively in writing how to extend these patterns. (Grade 3)*
- *Students' writing in math shows improvement. Explanations were clearer than last year. (Grade 3)*
- *Calculator use improved but students still need to round off to nearest whole number or decimal carefully. (Grade 3)*
- *Several areas of the test presented problems for many students:*
 - ~ *describing what they did that was like what a scientist would do to solve a problem*
 - ~ *supporting answers with data from charts*
 - ~ *probability and the use of fractions, decimals (Grade 3)*
- *Many students had difficulty with the vocabulary, especially in the math content. Examples are words such as symmetry and congruent. (Grade 3)*
- *Be sure to:*
 - ~ *teach symmetry.*
 - ~ *teach \$ signs and decimal points; many children had right answers but not the \$ sign.*
 - ~ *teach that estimation is not guessing. (Grade 3)*
- *Students could describe a choice they had made but frequently were unable to describe how they made their choices. (Grade 3)*
- *Students do not understand probability. (Grade 3)*
- *Students seem to do well on even/odd numbers, estimating, rounding and patterns. (Grade 3)*
- *Students need to work on number sentences and be able to write one. (Grade 3)*

- *Graphing skills poor. (Grade 5)*
- *Students need to know the difference between MEAN and MEDIAN. (Grade 5)*
- *Students need to know how to write a number sentence as opposed to a grammatical sentence and a number problem. Students working in pairs on an activity testing probability sometimes got confused with 2 dice - they would each take one die and they try to do the probability and combinations themselves. (Grade 5)*
- *Most of the students were successful in using the chart (pattern) to calculate the amount of fencing needed in one task. But these same students were not successful in explaining the pattern or explaining how they calculated the amount of fencing. In many cases students can perform a process but cannot explain in writing what they have done. (Grade 5)*
- *Many students had a tremendous amount of difficulty designing and displaying data in a table form and in organizing and displaying data in a graphic display. They didn't seem to understand the terminology "line plots" and how to plot the information from the experiment. (Grade 5)*
- *In math activities, students need to go over their answers and computations to make sure they didn't leave out one number or hit the wrong button on the calculator. (Grade 5)*
- *The term "mean" seems largely untaught. (Grade 5)*
- *Many of the students seem to have a difficult time with using protractors, defining the difference between perimeter and area, figuring area, knowing some math terms such as congruent, parallelogram, and sequence pattern. Students seem to enjoy the theme aspect to the test, to take a problem and follow solutions to the end. There was a definite higher level of skill demonstrated with straight fact questions as opposed to "thinking" areas. (Grade 5)*
- *Students need to work on using a compass, prime numbers, and application of area and perimeter. (Grade 5)*
- *In mathematics, students did not do well with problem solving or finding a percent of a number. When solving a word problem students would skip steps, creating a final answer that did not make sense. Students need to think about the final answer and ask "Does this make sense?" With percents, students need to realize that 12 out of 15 is not 12%. (Grade 5)*

- *Students seem to function well only when specific information is provided and they are asked simply to perform well defined tasks (such as +, -, x, ÷). They fall far short when they are expected to think or interpret. They also do not express themselves well when asked to explain or describe a process - and the vocabulary (especially spelling!) is extremely poor. (Grade 5)*
- *Use of metric system cannot be stressed enough, i.e., how many centimeters in a meter? (Grade 5)*
- *Students do not understand how to do a stem and leaf plot and the majority have never heard the term before. (Grade 5)*
- *Most kids could not make adequate charts, graphs, and could not write complete investigation results including conclusion, data and steps involved. (Grade 5)*
- *Students must recognize that if they do not round when asked or give units when requested, their response receives no credit whatsoever. (Grade 8)*
- *Many students remembered geometric formulas, especially for the volume of a rectangular solid. Most of the students attempted to answer the questions. (Grade 8)*
- *Students need to practice drawing line graphs. I saw 2 correct and graded over 1,000 tests. (Grade 8)*
- *Their weaknesses seem to be percentages and a lack of ability to read a problem carefully and think about it. (Grade 8)*
- *From the students' performance I feel they need a great deal of study in solving word problems and understanding ratios and percents. (Grade 8)*
- *Monetary notation is poor. For example, .05 is seen as .5 or \$.50 is seen as 5. (Grade 8)*
- *Conversion from one unit of measure to another was poor. (Grade 8)*
- *Graph completion (being able to fill in a chart accurately and completely) was a weak area. Graphs were often left untotaled, blank or incomplete. (Grade 8)*
- *Students do not recheck work - especially the math. Simple addition and multiplication mistakes often found. (Grade 8)*

- *Students need to know:*
 - ~ *how to use the protractor*
 - ~ *how to calculate area when it is not a rectangle*
 - ~ *place value; zeroes and decimal point sequencing numbers and filling in missing numbers*
 - ~ *recognizing numerical patterns*
 - ~ *multi-steps mathematical problems*
 - ~ *how to convert from meters to centimeters, etc. (Grade 8)*

- *I noticed misuse of equipment measuring devices: rulers, protractors. (Grade 8)*

- *The students did not check to see if their answer were reasonable!!! (Grade 8)*

SCIENCE

- *Students in general should receive more instruction that is related to problem solving. (n.g.)*
- *All answers should be labeled (feet, sq. inches, cm etc.) Students should check to see if their answers are reasonable. (n.g.)*
- *Most students can read charts for information and fill in blank charts. (Grade 3)*
- *Students need to be able to read a thermometer (particularly an odd number of degrees, i.e., those between clearly marked increments on the thermometer). (Grade 3)*
- *It seems most students weren't even motivated to conduct experiments in which they only had a small responsibility because they were in cooperative groups. (Grade 3)*
- *In the classroom, students need to learn:*
 - ~ *how to display data and use the data to make choices and explain those choices*
 - ~ *probability and how to express it in fractions, decimals, etc.*
 - ~ *more about the scientific process and relate it to actual experiments in the classroom*
 - ~ *how to describe cooperative techniques they are using (e.g., sharing, taking turns) (Grade 3)*
- *When asked to list things a scientist would do in a specific context, students tended to list things that any scientist would do. (i.e., "study dinosaur bones"). Science studies should emphasize specific procedures that are involved in a given task. (Grade 3)*
- *Students also seemed to enjoy the science activities. They made good predictions, and most were able to illustrate the information in graph form. As teachers, we need to remind students of minor points, such as labelling answers as well as graph parts. (Grade 3)*
- *Responses to questions relating to use of scientific instruments (e.g., a thermometer) suggest students do not have many opportunities to use and become familiar with these instruments on daily basis. (Grade 3)*
- *Some students find it difficult to apply information and to make inferences. Many students indicated that they had fun doing some of the experiments. (Grade 3)*

- *Not many 3rd graders know what "cylindrical" or "probability" mean. Many do not provide answers because they cannot understand the questions. (Grade 3)*
- *As teachers we need to focus as much time on the critical thinking skills as on retaining knowledge. (Grade 3)*
- *Students seem to prefer the hands-on activities. They expressed pleasure when commenting on these. (Grade 3)*
- *Student feedback during testing seemed to indicate that hands-on activities (such as the science experiments) were enjoyed, particularly when students were asked to complete portions of such tasks cooperatively. (Grade 5)*
- *Students are often unfamiliar with words like "hypothesis" and expressions such as "for whom." They often use "invented" words such as "gloopy" or "humongous," and they use real words inappropriately ("nasty" to describe appearance rather than behaviors). (Grade 5)*
- *Many students had difficulty with identifying problems and giving related solutions. Many students identified problems but did not give solutions. (Grade 5)*
- *Students need to know the difference between a chart and a line plot to display scientific data. (Grade 5)*
- *By the 5th grade they should know the difference between increase and decrease. Graphs need to be labeled. (Grade 5)*
- *Students need practice in drawing conclusions after competing an experiment and supporting their conclusion with evidence. (Grade 5)*
- *Kids were very creative with designing and explaining a scientific invention. (Grade 5)*
- *Students need more practice following laboratory procedure. They need to work on such things as organizing data. Just filling in the data blanks teaches very little - let students practice organizing their own data. (Grade 5)*
- *Students need to learn to make predictions based on prior results. Predictions must be specific. Students need practice drawing conclusions based on given evidence. (Grade 5)*
- *Many of our students do not know what a dimension is. (Grade 5)*

- Work on the "forces"— namely gravity and friction and what they do to an object in motion. (Grade 5)
- Students enjoy the scientific experiments. Graphing skills, charting skills, and scientific method are weak. (Grade 5)
- A number means nothing without the unit. "5" gets no credit while "5cm" does. Metrics is the only system acceptable for full credit in a science task. (Grade 5)
- The kids love hands-on experiments - more often than not they stated it was fun - drawing ideas and concepts also seems popular. (Grade 5)
- Students also need to be taught how to take their findings from an investigation, come up with conclusions and learn how to make concrete suggestions. (Grade 5)
- Illustrations should be clear and labeled clearly. (Grade 5)
- Students should learn to use labels, especially in science (cm, mm, etc.) Most kids did not know what type of measurement is on a ruler, meterstick, etc. This should be taught. Students should be taught the concept of using balances. Students need more experience with "real" experiments. (Grade 5)
- Kids like the "hands on" parts of activities but then lose interest and don't seem to want to think through a series of applications. Most science students were unable to take concrete test results and apply them to related situations. (Grade 5)
- Students seem very environmentally aware and are better able to apply reading materials to questions in this area. Students have a high level of background knowledge and seem to be able to apply information to hypothetical situations and use cause and effect reasonings. (Grade 5)
- Students need to know the difference between MEAN and MEDIAN. (Grade 5)
- The students are better at getting information than interpreting the information. There is a need for developing classification skills. (Grade 5)
- A major concern I had during grading was the students' poor ability to follow directions. Teachers may want to emphasize skills related to interpreting instructions accurately (especially instructions given in writing). Key words such as decrease, increase, evidence, choose, need to be fully understood by students. (Grade 5)

- *Students must label the tables and graphs and learn to fill in charts. (Grade 5)*
- *Students need extra help in recording data during the experiment process. The general expression I got is the "fun" they had doing the experiments. That was positive. (Grade 5)*
- *Fifth graders had difficulty making connections between the activities or experiments and a similar real life situation. (Grade 5)*
- *Lever and balance questions were not understood. (Grade 5)*
- *Students frequently do not include units of measurement on math and science work. (Grade 8)*
- *Students have difficulty with the concept of ratio in reference to a data table. (Grade 8)*
- *Students need to recognize when an answer must be based not on their personal opinions but on the facts that were provided in text resources or obtained through their investigations. (Grade 8)*
- *Students cannot compare results from two different kinds of data. (Grade 8)*
- *Students do not know what a Punnet Square is. (Grade 8)*
- *For "hands on" tasks, some students did not follow directions/steps; thus they gathered distorted and wrong data. (Grade 8)*
- *In general, students do well with interpreting charts, graphs and tables. (Grade 8)*
- *Students seemed to need help identifying natural resources. (Grade 8)*
- *Students have difficulty with the "technical" vocabulary and therefore are usually "off task" or provide answers which are not complete. (Grade 8)*
- *Students appeared enthusiastic when it came to diagrams and more tactile projects, but less interested in expressing themselves using the written word. (Grade 8)*
- *Students don't seem to understand difference between contagious and non-contagious diseases. (Grade 8)*

SOCIAL STUDIES

- *Vocabulary is an area where many had trouble. Most seemed to miss "economic effects." (n.g.)*
- *Most 3rd graders have no idea what a country is. Teach similarities and differences within and among countries and cultures. (Grade 3)*
- *Emphasize that students need to include more than one example in answers to questions asking for such things as ideas or ways something is done. (Grade 3)*
- *Students seemed to enjoy creating their own features on the map. (Grade 3)*
- *A majority of the students understood and utilized the term "compass rose." (Grade 3)*
- *Most children have learned use of a compass rose for following directions on a map - but they may not have the concept behind it. (Grade 3)*
- *Encourage labeling of all drawings, maps, charts, etc. (Grade 3)*
- *Students need more work on interpreting maps (Grade 3)*
- *Understanding of time periods in history is very poor. Using researched information to draw conclusions is also poor. (Grade 5)*
- *"Conflict," "Cooperation," "Compromise," are obviously misunderstood. (Grade 5)*
- *Students need help with map skills, including parts of a map and general geographic locations. Students should practice reading and developing map symbols, pictures that represent ideas/places, etc. (Grade 5)*
- *In social studies many children had a difficult time telling about life during the mid 1800's. Their answers typically included twentieth century things. They were more comfortable with facts than with "thinking" activities. (Grade 5)*
- *There seems to be a lack of knowledge of the lifestyle of different periods, including that of only a few decades ago. (Grade 5)*
- *Students must work on time concepts. (Grade 5)*

- *When the students are requested to respond to a single question they do a good job (for example - why did the immigrants move?). However, when they are asked to respond to a more generalized question and then give evidence or support they frequently flounder. (Grade 5)*
- *Please tell the kids a legend on a map = Key!!! (It is not a little story about the place). (Grade 5)*
- *Geographic knowledge should be sufficient to distinguish various land/water forms. (Grade 5)*
- *Students do not understand the difference in location of continents. (Grade 5)*
- *A generalization can be made that student lack the ability to follow specific instructions. For example, students did not follow directions when the question asked for a short-term and a long-term effect. (Grade 8)*
- *Students often confuse members of various social groups in the past and sometimes judge them by modern standards. (Grade 8)*
- *Students were doing a good job of pulling correct information from the charts. (Grade 8)*
- *A large number of students appeared to have no idea of what a table is. Perhaps students are being taught to read tables and charts, rather than having to develop them. (Grade 8)*
- *Students need more work in the areas of:*
 - ~ *constructing and using time lines*
 - ~ *stating opinions and supporting them with facts*
 - ~ *graphic organizers (as opposed to "graphs")*
 - ~ *creating charts*
 - ~ *constructing maps (using essential map elements) (Grade 8)*
- *Students do not seem to be very mature in their thought processes or approaches to comparing. (Grade 8)*
- *Social studies students appear to have absolutely no concept of when "colonial times" were nor of the social institutions and cultural mores of the day. They consistently inject 20th century values into 18th century institutions without allowing the latter to stand on its own merits. (Grade 8)*

- *Students seemed to need help identifying natural resources. (Grade 8)*
- *Students need to develop their ability to analyze historical events and draw conclusions. (Grade 8)*
- *Students do not have a clear idea of what U.S. economy means. (Grade 8)*

ACTIONS

GENERAL

- *I'll continue to seek to give students many opportunities to discuss and evaluate situations and arrive at conclusions. (Grade 3)*
- *In general, it would help our students if we teach them test-taking skills: to read the question carefully, to make sure their answers make sense and are answering what is being asked, to budget their time, to explain their answers thoroughly. (Grade 3)*
- *Students can use highlighters or other marking strategies to help them identify key cues in the activities. (Grade 3)*
- *I think all teachers should be given a list of the outcomes MSPAP is measuring. All teachers need to see sample tasks so that they can teach appropriately. Dimensions of Learning and Thinking are very helpful. Time needs to be provided for instructional teams to work together and create interdisciplinary tasks which meet specific outcomes for various contents. (Grade 3)*
- *How about letting testing groups visit the teacher the week before testing, have a scavenger hunt in the room to find charts, pencil sharpener, etc. to familiarize with surroundings? (Grade 3)*
- *Teach students the technique of circling key words in directions so they can look back and quickly see that they haven't missed any of the steps. (Grade 3)*
- *Teach your students to look for plurals such as: ways, reasons, examples. If the question does not specify how many answers are expected, then the plural form should be a signal telling them they must give 2 answers to receive full credit. (Grade 3)*
- *Emphasize the writing process - webbing, developing, organizing, and editing. (Grade 3)*
- *Help students read various questions and then ask what does the question require for a correct response. (Grade 3)*
- *Focus in on what the question is asking. Students need to be given opportunities to identify multiple responses to a question and then through reasoning or evidence come up with the most appropriate choice. They also need to understand that there is not always one correct answer to many questions. (Grade 3)*

- *Remind children that if it's a two part question, they must answer the second part, too. Many forget. (Grade 3)*
- *Emphasize the word "explain" in the directions. Also stress that unless specifically instructed to "list" or "identify," students should write their answers in complete sentences and elaborate upon on their answers (this will improve scores). (Grade 3)*
- *Teachers need to use direct teaching methods for thinking skills and require children to examine their thinking steps in all subject areas. (Grade 3)*
- *We will work on more long range tasks and practice following directions independently. (Grade 3)*
- *How about a short film or a visit from older students who have taken the test who could answer students' questions and give helpful suggestions? (Grade 3)*
- *As a librarian I will try to reinforce skills from the classroom in the library - i ll work on getting the kids to apply their research to other activities. (Grade 5)*
- *Teach key words used in the various disciplines, especially in science and social studies, and have students perform interesting activities that require them to use key words effectively and understand the concepts behind them. Develop a positive classroom environment for all students - Some are slipping by with very poor self-esteem, expecting to fall before they even try. Point out the talents of all students regularly, and compliment efforts/ achievement. (Grade 5)*
- *Model and practice writing opinions with our students that are supported by text information, prior knowledge, and/or personal opinion. (Grade 5)*
- *I plan to use the rubric grading system in my classroom this year and also to try to improve ways students can apply given information. In order to do this, I plan to ask more higher level thinking questions and spend more time hypothesizing about possible solutions. (Grade 5)*
- *Use more integrated tasks developed with other subject teachers. (Grade 5)*
- *Teachers should try to incorporate more ways to apply information within the classroom and also should try grading using rubrics. (Grade 5)*
- *I plan to get a list of the MSPAP outcomes and incorporate them more into my planning. (Grade 5)*

- *Focus on group skills - teach kids to work together, even if they don't get along. This is an important "life" lesson. (Grade 5)*
- *I am going to give activities that present a problem and help the children plan a logical step-by-step solution to it. They need many and various opportunities for hands-on approaches to solutions. (Grade 5)*
- *During the school year, teachers should provide more essay opportunities and fewer multiple choice opportunities. (Grade 5)*
- *I hope to provide many role-playing activities where the children can put themselves in specific situations and find solutions to problems. (Grade 5)*
- *I will make greater use of other resources outside my content area in order to integrate my curriculum with science, social studies, and math more fully. (Grade 5)*
- *I would focus on how to read a question to get what is asked for. (Grade 8)*
- *Higher level thinking skills should be incorporated on a regular basis rather than only at certain times. (Grade 8)*
- *I intend to place emphasis on completing work. I know that in some cases children just ran out of time so they had empty spaces. Many times, I would guess, the children saw the size of the task and didn't bother. That's a lazy habit I see frequently in the classroom and intend to break it. Another reason, besides laziness, is lack of confidence. Children don't think that they can do a task so they don't try. This is also an attitude that concerns me greatly. (Grade 8)*
- *Give the students more opportunity to formulate a conclusion based on evidence they have gathered. (Grade 8)*
- *Give the students more of a chance to detect those conclusions. (Grade 8)*
- *Bloom's Taxonomy should be incorporated in all teaching so that students are able to recognize higher-order questions. They should be trained as to how to answer them correctly. (Grade 8)*
- *Students would benefit from lessons which teach procedures for success with written directions. This would include identifying key words, reading the entire assignment first to clarify task, and visualizing the task then reading directions again to check understanding. (Grade 8)*
- *Stress proofreading to assure that responses correlate to the question asked. (Grade 8)*

- *Having classroom warm-ups which include students' interpreting questions-so they understand what is being asked of them. (Grade 8)*
- *I will use more multi-step problem solving activities in all subjects, not just math and science. (Grade 8)*
- *I also intend to emphasize careful reading of questions and writing complete answers. (Grade 8)*
- *More critical thinking and extrapolation from materials given. (Grade 8)*

READING

- *Within my writing-reading curriculum, I plan to continue my teaching of rereading questions and answers, planning before writing, attending to main idea and details, and completely answering a question. (Grade 3)*
- *Build in increased vocabulary work. (Grade 5)*
- *We should help our students to recognize that illustrations are important to enhance meaning of story and clues to events, etc. and we should stress the importance of details, logical sequence, and cause and effect relationships. (Grade 5)*
- *The most glaring thing I've noticed is the inability to draw specifics from the text. As teachers, we must continue to make students aware just what "specifics" are and what it means to get support from the text. (Grade 5)*
- *During reading I will work on the difference in how we read for information in the content areas and when reading fictional selections. Also, reading and interpreting directions for themselves must be stressed, rather than always orally interpreting them for them. We must teach children to be able to read a selection and then write about it without plagiarizing. (Grade 5)*
- *I see first of all more journal writing, followed by discussion of literature in respect to point of view, comparing and contrasting of characters, studying realism in literature, etc. These activities need to be individual writing activities as well as some cooperative learning activities so that the weaker writers can see the better writers' thought processes but then be challenged to duplicate this process later on their own. (Grade 8)*
- *Provide a variety of vocabulary development activities, especially when words can cross over into other subject areas (i.e., variables-science/math). Also whenever possible, present examples of how the words are used in and out of the academic context. Words are not used unless you own them; by this I mean it is part of you in reading, writing and speaking. (Grade 8)*

WRITING/LANGUAGE IN USE

- *It may be helpful for teachers to use the limited writing process (LWP) icon so that students become familiar with what it signifies. (Grade 3)*
- *When they are writing poetry, encourage students to be original. (Grade 3)*
- *I feel it may be helpful for teachers to use the LU icon during the school year so that students know when an answer must attend to capitalization, punctuation, spelling, sentence formation and effective word choice. (Grade 3)*
- *In the classroom, we need to focus on:*
 - ~ *Capitalization - especially at the beginnings of sentences.*
 - ~ *Punctuation - periods and question marks.*
 - ~ *Following directions - students fail to answer the questions asked.*
 - ~ *Story development - beginnings, middle, end*
 - ~ *Support responses - I agree because...*
 - ~ *Complete sentences - not just list of answers. (Grade 3)*
- *Within my writing-reading curriculum, I plan to continue my teaching of rereading questions and answers, planning before writing, focusing on main idea and details, and completely answering a question. One format I use that really gives students preparation for this test is writing prompts with FATP (form, audience, topic, purpose) as a prewriting tool. (Grade 3)*
- *Continue to have students support their opinions or reasons with details from the reading. (Grade 3)*
- *As a first grade teacher, I plan to write more group stories in the beginning of the year, writing exactly what they say so they see that writing is "written talk." (Grade 3)*
- *More "learning log" type experiences, with the students writing more frequently to describe experiences, learning, etc. (Grade 5)*
- *Instruct and guide our students in writing paragraphs from graphic organizers. (Grade 5)*
- *Encourage our students to brainstorm for "What if..." situations. (Grade 5)*
- *Teach students to use independently a variety of graphic organizers to organize thoughts and details of written compositions. (Grade 5)*

- *Have students do "peer response" regularly. (Grade 5)*
- *Utilize the Writer's Workshop strategy to teach skills. Score student writing holistically with an emphasis on a particular skill. (Grade 5)*
- *Good mini-lessons to conduct with students include ones on:*
 - ~ *We were/I was etc.*
 - ~ *Our-vs-are*
 - ~ *Where-vs-were*
 - ~ *Here-vs-hear*
 - ~ *To/two/too*
 - ~ *Commas in a series*
 - ~ *good and well*
 - ~ *there/their*
 - ~ *Contractions*
 - ~ *Subject Verb agreement (Grade 5)*
- *I'd suggest teaching spelling through context clues. (Grade 8)*
- *I see first of all more journal writing followed by discussion of literature in respect to point of view, comparing and contrasting of characters, studying realism in literature, etc. These activities need to be individual writing activities as well as some cooperative learning activities so that the weaker writers can see the better writers thought processes but then be challenged to duplicate this process later on their own. (Grade 8)*
- *In my classroom, every piece of writing will be scored using a rubric. Students will score each other as part of their peer response activities. Students will do more defending of answers in writing on a daily basis. (Grade 8)*
- *Writing should be taught as an ongoing process. (Grade 8)*
- *Writing must be a natural part of daily life and any educational experience. (Grade 8)*
- *I will emphasize revisions and careful proofreading. Pride and the desire to learn need to be fostered through writing. (Grade 8)*

MATHEMATICS

- *Stress activities with finding the areas and perimeters of places and fractional parts of these places. (n.g.)*
- *Emphasize verbalizing and writing out mathematical thinking steps to solve problems (Example: "What steps did you do to solve this problem?"). (n.g.)*
- *Use compasses, rulers, and other measuring "tools" throughout the school year so that pupils are able to use them with ease. (n.g.)*
- *We will have learning logs in science and math as well as regular journals where they can write what they have learned and their reactions to experiments. (Grade 3)*
- *Work on two-step story problems in math. (Grade 3)*
- *As a primary teacher, I will continue to have students participate in cooperative learning tasks and have students write in science, math, etc., on a regular basis. I will attempt to have students complete multi-step tasks as a group giving oral responses, then written group responses, finally written individual responses. (Grade 3)*
- *In the classroom, students need to learn:*
 - ~ *how to display data and use the data to make choices and explain those choices*
 - ~ *probability and how to express it in fractions, decimals, etc.*
 - ~ *more about the scientific process and relating it to actual experiments in the classroom*
 - ~ *how to describe cooperative techniques they are using (e.g., sharing, taking turns) (Grade 3)*
- *I will encourage others to teach students how to back up their answers, based on information from the test. (Grade 5)*

- *Teachers need to work on the following during the school year to be sure students have enough experience with:*
 - ~ *number sentences*
 - ~ *making predictions*
 - ~ *graphs and labeling*
 - ~ *probability*
 - ~ *prime numbers*
 - ~ *cause and effect*
 - ~ *explaining relationships*
 - ~ *drawing conclusions*
 - ~ *sequence (Grade 5)*

- *Please be sure to cover:*
 - ~ *simple measurement of angles (i.e., use of protractor)*
 - ~ *application of Pythagorean Theorem*
 - ~ *emphasis on putting units after numbers (e.g., do not give 3.45 as an answer but rather 3.45 ft., 3.45 lbs., etc.) (Grade 8)*

SCIENCE

- *In my classroom I will continue to seek to have available in the classroom, scientific instruments for children to use, touch and become familiar with. (Grade 3)*
- *As a primary teacher, I will continue to have students participate in cooperative learning tasks and have students write in science, math, etc., on a regular basis. I will attempt to have students complete multi-step tasks as a group giving oral responses then written group responses, finally written individual responses. (Grade 3)*
- *I feel that a stronger emphasis needs to be made on using terminology (i.e., "determine the probability," "the least and greatest," "make a prediction," "use the data," etc.) (Grade 3)*
- *We will have learning logs in science and math as well as regular journals where they can write what they have learned and their reactions to experiments. (Grade 3)*
- *Do more demonstrating (modeling) of how to "process information" to solve problems. (Grade 3)*
- *I also intend on continuing to expose them to as many things as possible, relating to "real" life situations. I will also be sure to explain what difficult words mean. (Grade 3)*
- *Work more on integrating science and social studies with other areas. (This is sometimes difficult with team teaching). (Grade 3)*
- *I plan on doing more hands-on activities which require students to work as individuals as well as in groups. The activities also require students to go through the science process - making predictions, observing, comparing, illustrating information, commenting on results, and applying what they learned. It requires more planning on my part, but I feel my students are better prepared. (Grade 3)*
- *I am going to develop more activities that require my students to explain "why" or "how." (Grade 3)*
- *Include more hands-on activities which require individual and small group work. continue to require students to go through the process including making predictions, observing, comparing and illustrating information. (Grade 3)*

- *I would suggest keeping a science journal (each child does this) or notebook - Have a new hands-on experiment once a week - Learn to record data - make charts - Discuss variable, constant friction, gravity, etc. (Grade 5)*
- *Do hands-on science experiences, then have students write about it, and explain what they did. (Grade 5)*
- *Teachers need to work on the following during the school year to be sure students have enough experience with:*
 - ~ *number sentences*
 - ~ *making predictions*
 - ~ *graphs and labeling*
 - ~ *probability*
 - ~ *prime numbers*
 - ~ *cause and effect*
 - ~ *explaining relationships*
 - ~ *drawing conclusions*
 - ~ *sequence (Grade 5)*
- *Have students write an additional paragraph summary in their lab results (as well as all the steps of the scientific method). (Grade 5)*
- *The metric system needs to be used in classrooms. There should be emphasis placed on the metric system in math and science courses throughout elementary through high school courses. (Grade 5)*
- *Students need to work more with "models" and know that this is just a simulation. They should then be able to make comparisons between the model and the real event. (Grade 5)*
- *I intend to give my students many opportunities to draw conclusions from results/observations when to explain clearly the thinking that lead to their conclusions. (Grade 8)*
- *Introduce problems that require using logic to arrive at a viable solution. (Grade 8)*
- *Use lots of experiments from which to draw information. (Grade 8)*
- *Do lots of work with predicting outcomes. (Grade 8)*

SOCIAL STUDIES

- *We will work on more long range tasks and practice following directions independently. (Grade 3)*
- *Students need to be given many opportunities to work with and create maps accurately. (Grade 3)*
- *I will encourage others to teach students how to back up their answers. (Grade 5)*
- *Having the students read either original or secondary or both types of material to answer reflection, inference, detail, explanation and drawing conclusions questions will both help my students prepare for the MSPAP Test for life. (Grade 8)*
- *I am going to profile certain segments of each of the civilizations we study in different time periods to increase their skills in this area. (Grade 8)*
- *I am going to continue to teach students to pace themselves for tests by giving estimated times for each segment to be completed. (Grade 8)*
- *I will continue my use of primary source material so that students can understand the more flowery style of the past. (Grade 8)*
- *I will continue to emphasize the use of constructing charts and graphs to show information. (Grade 8)*
- *More emphasis needs to be placed on teaching geographic concepts such as continents, climates, political features, etc. (Grade 8)*
- *Additional map work - being able to answer questions related to Maryland or U.S. when using maps which do not have countries/states identified. (Grade 8)*

