AN INVESTIGATION OF PORTFOLIO ASSESSMENT WITH FIFTH
GRADE TEACHERS AND STUDENTS

A CASE STUDY

by:

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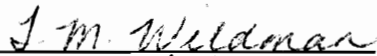
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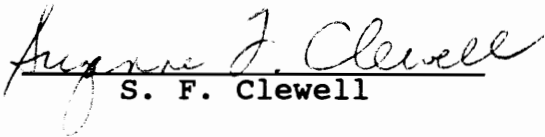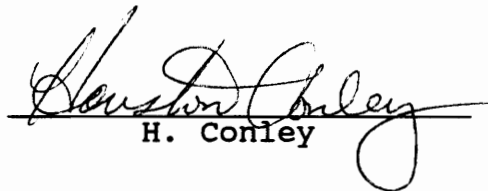Curriculum and Instruction

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Committee Chairman: Thomas Gatewood
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(ABSTRACT)

A particularistic case study was designed to
investigate how portfolio assessment contributed to
teachers' instructional decision-making. Four fifth grade
teachers and twenty-four fifth grade students were selected
as the participants for this case study. The dual role of
teacher as instructional leader and assessor was examined.
Data were collected from classroom and team observations,
formal and informal interviews, document analysis,
audiotapes, and team planning sessions.

This study demonstrated the empowerment and autonomy
that teachers developed during their experience with
portfolio assessment. Teachers increased their authority
related to instructional decision-making, initiating self
and student change, and empowering students. Analyzing
student writing samples and creating benchmarks inductively
derived from their own students' writing samples provided
teachers with an active role in determining the
instructional focus. Teachers increased their level of
decision-making through collaborative idea sharing,
brainstorming sessions, and peer encouragement. They

transferred these skills to other areas.

The change in teachers' instructional practices was gradual and evolutionary. The decision-making processes that the teachers underwent were context dependent and were directly related to their analysis of student writing portfolios. The monthly portfolio assessment sessions served as the catalyst for change. Teachers developed instructional adaptations and modifications based upon specific areas of student need. This process resulted in changes in the following areas: instruction, assessment, attitude, student expectations, and philosophy. The integration between assessment and instruction resulted in authentically designed experiences for students. Gradually, teachers shifted their cognitive exploration techniques from concrete to abstract techniques. The expectations for decision-making also shifted from teacher ownership to student ownership.

A socialization process emerged whereby students assumed more ownership and direction for their own learning. An integrated instructional/assessment system was developed for the students which paralleled the system that was created and used by the teachers. Students inductively derived their own benchmarks based upon their own writing. As a final step toward student empowerment, metacognitive strategies were utilized by having each student evaluate his own progress by providing both quantitative and qualitative documentation along with personal reflections and future writing goals.

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Introduction

Background

Formal testing of students within the American public schools dates back to the mid-nineteenth century. Early examinations in public schools consisted of essay questions, short answer responses, and labeled diagrams. In the 1920's and early 1930's, multiple choice and true/false examinations emerged in education (Odell, 1928). Multiple choice techniques were used to help administrators monitor instructional programs. A significant increase in the use of multiple choice tests occurred in the 1960's as a result of the following two factors: (1) the development of computers made scoring faster and cheaper; and (2) multiple choice tests were a quick and easy way to report the success of federal compensatory education programs (Hymes, Chafin, & Gonder, 1991). As the 1970's approached, Americans began perceiving a decline in educational standards and demanded a return to basic instruction. These demands fueled a "minimum competency testing" movement which utilized standardized tests to establish levels of competency. The education system responded to the demand for establishing minimum competencies and succeeded in raising test scores. However, it was determined by 1983 that minimum competency

examinations were not meeting educational needs. In A
Nation At Risk, the National Commission on Excellence in
Education found that the "minimum" score became the
"maximum" and lowered standards for all. As a result, the
Commission set new standards with high expectations and
goals for all learners (ETS Policy Notes, 1990). By the
1980's, standardized testing was being used to equate
improved learning with higher test scores. The test results
were often used at local levels for pupil tracking,
selection of students for special programs, and
instructional planning.

   During the Reagan years (1980-1988), improved learning
was equated with higher test scores. As a result, teachers
often took time away from instruction to teach items of the
test. Tested areas were often taught at the expense of
untested areas (Darling-Hammond & Wise, 1985). Teachers
taught the precise content of the tests rather than the
underlying concepts and skills; and they were taught in the
same format as the test rather than as they would be in the
real world. However, the educational reform movement of the
1990's denotes growing dissatisfaction with the traditional,
multiple-choice forms of testing. This heightened emphasis
on assessment is based upon the following criticisms
(Worthen & Spandel, 1991):

1. **Standardized achievement tests do not promote student learning.**

   Critics contend that they do not enhance the learning process, diagnose learning problems, or provide students with rapid feedback. They provide general performance information in content areas that the test developers designate. They do not shed insight into a student's skill, ability, or learning style.

2. **Standardized achievement and aptitude tests are poor predictors of individual student performance.**

   Some tests may predict future performance of groups, but they do not accurately predict individual performance. A standardized test provides information at one point in time. Therefore, it is very limited in its scope.

3. **The content of standardized achievement tests is often mismatched with the content emphasized in a school's curriculum and classrooms.**

   Standardized tests are developed for broad use and do not fit into a specific county or school curriculum. Instead, they attempt to sample what is typical for most students at a particular grade level at most school districts. Therefore, the results do not totally reflect any school district's

curriculum. Large chunks of curriculum that have been taught are often left untested.

4. **Standardized tests dictate or restrict what is taught.** Often teachers revert to "teaching to the test", and do not adequately teach other county mandated concepts. Standardized tests can end up actually driving the instruction.

5. **Standardized achievement and aptitude tests categorize and label students in ways that cause damage to individuals.**
   Students are often categorized or labeled based upon their individual scores. Unfortunately, standardized tests do not provide sufficient information about a student's abilities. Often, a difference in performance on even one test item can significantly raise or lower a student's ranking.

6. **Standardized achievement and aptitude measures are racially, culturally, and socially biased.**
   Most published tests tend to favor economically and socially advantaged children over their counterparts from lower socioeconomic families. Standardized tests can place those unfamiliar with the concepts and language of the test at a disadvantage.

7. **Standardized achievement and aptitude tests measure only limited and superficial student knowledge and**

behaviors.

Critics argue that the content measured on
standardized tests is trivial and irrelevant
(Worthen & Spandel, 1991).

It is not surprising then that assessment is at the
cornerstone of education in the 1990's. Educational reform
is focusing on the President's education agenda, America
2000; and the National Education Goals set by Governors'
concerns for international competitiveness renewed calls for
restructuring and accountability at the state, local, and
school level. The current emphasis on assessment is
resulting in an explosion of interest in alternative forms
of assessment. Advocates for alternative assessments
believe that the new tasks should be redesigned to more
closely resemble real learning tasks. These new assessments
should go beyond simplistic, multiple choice questions,
requiring students to perform in situations that are both
more lifelike and more complex. Both process and product
can be examined, providing a clearer, more detailed picture
of the child's abilities. Tests should require more complex
and challenging mental processes from students. The new
dimensions of the assessment should also be expanded often
enough that there can be no benefit to practicing a skill in
one particular format. According to Robert Glasser (1988),
the following indicators should be included in assessments:

- **Coherence of knowledge.**

  Assessment should tap the connectedness of concepts and the student's ability to access interrelated chunks.

- **Principled problem solving.**

  Students need to recognize the underlying principles and patterns needed to solve the problem.

- **Knowledge use.**

  Students need to understand and use the conditions that mediate the use of knowledge.

- **Automatized skills.**

  Skills need to be automatized to become integrated into the student's total performance.

- **Metacognitive or self-regulatory skills.**

  Assessment should determine whether students can monitor and evaluate their own understanding (Rothman, 1988).

These new assessments emphasize the importance of examining the processes as well as the products of student learning. Students should be encouraged to explore their responses in open-ended, complex problems. According to this view, education should focus on "higher order abilities", including problem-solving and thinking skills. Alternative assessments activate students' prior knowledge, recent learnings, and relevant skills in order to solve

authentic problems. Alternative or "authentic" assessment may include performance-based tests, observations, open-ended questioning, exhibitions, interviews, and portfolios. For an assessment to be truly authentic, the context, purpose, audience, and constraints of the assessment should connect with real world situations and problems (Wiggins, 1989).

Portfolio assessment encourages an integration between assessment and instruction. It should represent students' abilities in a variety of ways -- depth, breadth, and over time. With portfolios, the assessment activities and classroom activities can occur throughout the school day. Teachers do not have to take time away from the instructional program. Portfolio assessment can provide educators with an assessment system that includes multiple measures taken over time. It has an advantage of containing samples of student work that is assembled in a very purposeful manner. Portfolios also have the ability of providing longitudinal data and multiple measures of the same outcomes to create a complete picture of student achievement.

Statement of the Problem

Using portfolios without a clear plan can lead to misunderstandings with parents, administrators, and students (Black, 1993). Educators are experimenting with portfolio

assessment in a variety of formats. According to Ruth
Mitchell, author of <u>Testing for Learning</u> (1992), portfolios
are used as a teaching tool, professional development
activity, assessment measure, and research tool. Sandra
Murphy, author of "The Quarterly of the National Writing
Project and the Center for the Study of Writing" (1990), has
found that teachers vary their intent for using portfolios.
Teachers may utilize portfolios to motivate students,
promote learning through reflection, evaluate or change
curriculum, replace other tests, track growth over time, or
evaluate students' thinking over time. Additionally, there
is variation in the persons who compile and organize the
portfolios, the nature of the contents, and the functions
that result when portfolios are used for assessment. The
assessment practices differ in their purposes (ranging from
global celebrations of accomplishments to summative grading
progress), the persons involved (teacher, parent, student,
peer, evaluator), and the form of assessment (grades,
holistic or analytic scoring, narrative summary) (Gearhart,
Herman, Baker, & Whittaker, 1992; Freedman, 1991; Tierney,
Carter, & Desai, 1991; Murphy & Smith, 1990; Wolf, 1989).

When educators talk about portfolio assessment, they do
not always share the same meaning. There is controversy
over the method, content, and purpose of assessment.
Depending upon the desired outcome, educators approach

portfolio assessment from many varied schools of thought. The "buzzwords" portfolio assessment often result in miscommunication and misunderstanding among professionals. Theoretical and practical problems associated with assessment measures involve judging the quality of portfolio samples, managing the bulk and cumbersomeness of various forms of student work, and verifying students' work.

The guiding principle of portfolio assessment is to provide an opportunity for richer, more authentic assessment of student performance. However, unless a format is developed that is explicit and directive about the form and procedures for documentation yet is permissive about the content, educators will continue to approach assessment without common understandings (Calfee & Perfumo, 1993). Questions such as the following need to be addressed:

What should be included in a student's portfolio?

What processes should be used to evaluate the portfolio? What standards should bear on the adequacy of student work?

For what purpose will the assessments be used? Current research does not provide a valid account on how portfolio assessment is to be measured. Districts and states are attempting to incorporate standards and judgments from external groups. Yet, there does not seem to be any connection between portfolio assessment and providing data

for instructional decisions within the classroom (Calfee & Perfumo, 1993).

Since there is no definitive research describing a methodology for portfolio assessment which will yield data for teachers' instructional decision-making, this study was specifically designed to examine how inductively derived portfolio benchmarks can serve as a catalyst for instructional decision-making by teachers.

Purpose of the Study

The purpose of this study was to investigate how portfolio assessment contributed to instructional decision-making by fifth grade teachers. The dual role of teacher as instructional leader and assessor was examined. Data were collected as to the instructional decision-making processes used by teachers following their formative portfolio assessment. Specifically, the following research questions were answered in this study:

1. How are inductively derived writing portfolio benchmarks a useful instructional tool for teachers?

2. What evidence is there that teachers' instructional practices change over time by monthly assessment of student writing portfolios?

3. How are analytic and/or holistic scales a useful tool for teachers to use during their decision-making processes?

Statement of Significance

The focus of this research project was to provide needed information related to portfolio assessment models. This research project integrated suggestions from other studies, researchers, and assessment techniques. Specifically, this study had several unique features that provide information to others who may be interested in the assessment component of student portfolios. Instead of summative evaluation for both students and teachers, this project generated monthly feedback. The monthly assessment provided concrete data related to student progress toward the benchmarks. Therefore, as students' needs changed throughout the year, teachers, in turn, were able to adapt, modify, or change their instructional focus to meet these needs. A dimensionalized format for each benchmark was developed for both qualitative and quantitative information for teacher and student use.

Monthly assessment of student progress was a feature that has not been used in other research projects. This type of frequent, immediate feedback provided current, up-to-date information on student progress. Since the classroom teachers and reading specialist served as the assessors, the monthly feedback was able to be incorporated into lessons immediately. In most other research projects, outside evaluators or assessors were brought into schools to

complete the assessment component. However, in this
project, teachers were trained on the use of both holistic
and analytic scoring and were able to assess student growth
on a continuous basis. Empowering teachers to assess
student progress and to make instructional decisions based
upon their judgments has not been examined in relation to
portfolio assessment. This study provides information on
how teachers plan strategies, design follow-up lessons, and
deliver instruction as a result of decisions made during the
analysis of portfolios.

Another notable feature of the study was the creation
of benchmarks that were established inductively. The
benchmarks evolved through continuous analysis and
comparisons of student writing samples. Rather than
imposing external standards which may or may not reflect the
needs of these particular students, inductively derived
benchmarks were utilized. These benchmarks were developed
as a direct outgrowth of coding student writing strengths
and needs. Establishing benchmarks by having data emerge
through systematic data analysis has not been utilized in
studies thus far. Usually, benchmarks are predetermined and
student writing is then compared to these preconceived
standards.

This research project also employed another feature
that was slightly different from others of its type in its

reliance on portfolio items. Both standard items and student-selected writing items were included throughout the eight month study. The portfolio was standardized as to the types of writing items to be included and the benchmarks and rubrics for assessing them, but the specific samples of performance chosen for inclusion varied. The goal of selecting uniform core items in two genres and student-selected items in the same two genres was to impose enough standardization to ensure the equity and comparability needed for large-scale assessment while still providing enough freedom for flexibility in the classroom.

Portfolio items were collected in the area of writing in narration and persuasion. In other portfolio projects, a wide mix of genres obscured evidence of change over time in writing (Gearhart et al., 1992). The National Assessment of Educational Progress (NAEP) has recently discovered that most students write informative or narrative pieces that are based on the students' own ideas and observations (Gentile, 1992). This same study indicated the need to collect more systematic information about students' writing activities. Therefore, the areas of narration and persuasion were selected as genres for further research. Additionally, these are both domains that students encountered when they participated in the Maryland State Performance Assessment Program (MSPAP) during May.

Finally, this project involved all authentic writing. There were no standardized tests, artificial writing situations, or timed assignments. Instead, this project emphasized a realistic learning context in which students were active participants in the development of their writing abilities. All of the students' writing occurred under natural classroom conditions. The writing pieces that students completed were anchored in real-world situations. They displayed genuine purposes and provided opportunities for students to apply knowledge they have acquired.

Limitations of the Research Study

This research project was a particulartistic case study focusing on a descriptive account of a portfolio project undertaken by a fifth grade team of teachers and their students. Therefore, the study was limited to in-depth observations and interviews of four fifth grade teachers, analysis of instructional documents and student writing portfolios, and observations of twenty-four fifth grade students during their language arts period. It is hoped that this study will provide a process for portfolio assessment that can be adapted or revised by other schools or educators. Generalizability to other settings may not always be possible. However, the intent of the researcher was to provide an understanding of this particular process and to enhance the field of research in portfolio

assessment. Reader generalizability will be possible to the extent that each reader applies the rich, descriptive observations and results to his particular situation.

Definitions

"Assessment" -- Any systematic basis for making inferences about characteristics of people, usually based on various sources of evidence; the global process of synthesizing information about individuals in order to understand and describe them. Assessment is often related to multiple traits and multiple methods of measurement.

"Standardized Assessments" -- Assessments designed to be given to large groups of students under similar conditions. They often feature a multiple choice format and have a mean score that identifies typical performance.

"Norm-Referenced Achievement Test" -- The most popular of the standardized tests. In addition to measuring how much a student has learned in a particular subject, it also compares the student's score against a "norm group" - a nationwide sampling of students who have already been given the test by the publishers. These norms can be as much as ten years old.

"Criterion-Referenced Test" -- This type of test measures whether a student has mastered specific learning objectives. It assesses a specified body of knowledge, skills or understanding to determine what has been learned

and what else needs to be taught. The score yields
information about a student's performance in relation to a
predetermined criterion. Students are measured against a
standard, not against each other.

"Performance-Based Assessment" -- Each student performs
tasks that require skills. The student is to complete the
tasks with knowledge instead of merely recalling or
recognizing other people's knowledge. It is often used to
integrate and apply knowledge that students have learned.
The tasks that students are asked to do often replicate the
challenges that students face in the real world.

"Authentic Assessment" -- Assessment that includes
performance tests, observations, open-ended question,
interviews and portfolios. The aim of authentic assessment
is to engage students in challenges that better represent
what they are likely to face as responsible citizens. The
context, purpose, audience, and constraints of the test
should connect in some way to real world situations and
problems.

"Portfolios" -- Samples of student work in categories,
genres, or problems. Portfolios show growth over time and
focus on the process. It is a purposeful collection of
student work that includes efforts, progress, and
achievements of students. The collection should include
student participation in the selection of content and the

evaluation through self-reflection. The collection should

include the criteria for selecting contents, judging merit,

and monitoring growth.

"Reliability" -- The dependability and consistency of

assessment results.

"Rubric" -- A scaled set of criteria that clearly

defines for the student and teacher what a range of

acceptable and unacceptable performance looks like. They

are the directions for how to recognize a benchmark.

"Benchmarks" -- Statements that signal levels of

mastery. They are often stated as standards.

"Holistic Scoring" -- Each student paper receives one

global score that is based upon the paper as a whole. It

requires less detailed feedback by providing information

about the range of overall writing ability of students. It

provides an opportunity for the reader to respond to the

whole paper as opposed to breaking down the parts.

"Primary Trait Scoring" -- It provides for a more

narrowly defined focus than holistic scoring by detailing

specific feedback regarding identified writing traits. In

this method of scoring, each paper is scored for one

specific primary trait. If other writing traits are to be

considered, they are scored separately by other evaluators

at another scoring session. The major drawback to this

method is that writing is only analyzed for the one

previously identified trait.

"Analytic Scoring" -- Each student paper receives a score on each individual criterion and a different rubric is used for each criterion. It can provide specific diagnostic information about a student's writing. Analytic scoring provides extensive feedback for students.

"Prompt" -- Any topic, situation, stimulus, or assignment given to students to elicit a sample of writing. It should specify a topic for the writer, purpose for writing, and intended audience.

Chapter 2

Review of Related Literature

Educational assessment is in a process of revision.
Old models emphasizing a norm-referenced approach are being
replaced with new models which encourage open-ended
questions, exhibits, demonstrations, hands-on experiments,
computer simulations and portfolios. Much of the research
supporting the ability of tests to influence schooling is
based on traditional standardized tests, and concludes that
such tests have a negative impact on the quality of the
educational program. With standardized testing, teachers
and administrators tend to focus planning and instructional
efforts on test content and devote more time to preparing
students to do well on the tests (Dorr-Bremme & Herman,
1983; Herman & Golan, 1991; Smith & Rottenberg, 1991).
Additionally, many of the researchers conclude that the time
focused on test content has narrowed the curriculum by
overemphasizing basic-skill subjects and neglecting higher-
order thinking skills. Standardized, multiple-choice tests
often lead to endless drill and practice on decontextualized
skills. The notion that learning comes about by the
accretion of little bits is an outmoded learning theory
(Shepard, 1989). Current models of learning are based on
the belief that learners gain understanding when they

construct their own knowledge and develop their own cognitive maps of the interconnections among concepts and facts. As a result, learning cannot occur by teaching isolated skills.

Proponents of learning theory also suggest that individuals need to receive rapid and specific feedback on what they have attempted. Unfortunately, with standardized tests students receive only aggregate scores which are reflected with a percentile score. The score does not contain a qualitative component; rather, it merely quantifies the test scores to rank the student and the school.

Given the extensive testing that has occurred, it is likely that the demand for test results that can be compared across student populations will remain popular in future years. A major issue then relies on whether a more comprehensive assessment of student abilities than the present standardized tests provide is a viable option to be considered by educators and researchers. Suggested alternatives are based on the concept of authentic assessment. This type of assessment is built on current theories of learning and cognition and grounded in views of what skills and capacities students will need for future success. Authentic assessment can also defined by what it is not -- traditional, multiple-choice items in a

standardized format.

According to cognitive researchers, meaningful learning is reflective, constructive, and self-regulated (Davis & Maher, 1990; Bransford & Vye, 1989; Marzano, Brandt, & Hughes, 1988). To know something is not just to have received information but to have interpreted it and related it to other knowledge one already has obtained. Authentic assessment seeks to directly measure the student's ability to perform in a given subject area and is designed to resemble real tasks as closely as possible. These types of assessment can take as many forms as one's creativity will permit. Alternatives presently being used include writing tests, portfolios, culminating exhibitions, projects, and videotapes.

Advantages of Authentic Assessment

Authentic assessment has many advantages over standardized tests. These types of assessment demand that students demonstrate real competence, not just the ability to recognize the correct answer from a multiple choice format. Demonstrating competence allows educators to analyze the process that the student goes through to get an answer. Authentic assessments also promote higher order thinking by presenting students with complex tasks such as open-ended questions. Higher level thinking by students requires that the students analyze information, orchestrate

skills, generate ideas, and synthesize ideas into coherent means of communication. These types of assessment also inspire teachers to teach for real, comprehensive understanding. They provide a means that is valuable and worthwhile. Authentic assessment also serves as a vehicle for teacher empowerment by encouraging teachers to play a central role in designing, administering, and scoring assessment tasks. These efforts are also more likely to motivate students to excel. They impel students to make their best efforts.

The development of concepts through authentic activity is the approach of cognitive apprenticeship. Cognitive apprenticeship supports learning in a domain by encouraging students to acquire and use cognitive skills in authentic domains (Brown, Collins, & Duguid, 1989). Authentic domains involve not only the situation, but also the activity and the concept. Learning is viewed as a life-long process resulting from acting in real world situations. Although many students are shown the tools or techniques of many academic concepts, they are unable to use that knowledge in authentic practice. Therefore, students should be exposed to the use of knowledge in authentic activities using problems encountered in the real world. Many of the typical school activities are not authentic and not fully productive or useful (Brown et al., 1989). Cognitive apprenticeship,

on the other hand, offers the opportunity to emphasize context-dependent, situated, and enculturating learning. It provides for an integration of the concept, activity and culture through authentic situations. Authentic activities allow students to explore concepts that are situated and interactive. They enable students to discover solutions to emergent problems.

Alternative assessments offer the promise of integrating assessment measures with real life, authentic experiences and opportunities. Students can be actively engaged in their own learning and assessment. In this type of situation, the role of the teacher includes helping students determine and clarify the assessment task and its criteria, participating in the ongoing assessment of work in progress, and proposing alternative ways that students might meet the criteria.

Alternative assessment techniques provide the opportunity to challenge students to explore the possibilities inherent in open-ended, complex problems, and to draw their own inferences. These types of assessment make explicit and formal what was previously implicit and informal. They also encourage teachers to articulate their instructional goals clearly, to ensure alignment between their goals and current views on effective teaching, and to gather systematic evidence to guide their instructional

efforts.

Expectations of Authentic Assessment

Authentic assessments are not all alike. However, according to Richard J. Stiggins (1988), one of the early advocates of authentic assessment, the following components should be included in designing the assessments:

- A reason for the assessment.
- A particular performance to be evaluated.
- Exercises that elicit that performance.
- Systematic rating procedures.

According to Stiggins, this type of assessment could take place in a variety of settings. The response could occur within the everyday classroom activities or as a response to a carefully structured situation presented by a specially trained test administrator. The response could be given in writing or orally. The performance may be observed and graded on the spot, or it may be recorded on video or audio tape for later scoring.

Given the complexity of the task development, the following criteria can serve as guidelines when developing authentic assessments:

- Tasks should reflect complex thinking skills and should match important outcome goals that have been set for the students.
- Tasks should pose an enduring problem, similar

to problems or situations that students are likely to face in their everyday lives.

- The tasks should be fair and free of bias. Students with a particular cultural, economic, or social heritage should not be singled out.
- Students should view the tasks as credible. They should be viewed by the students as meaningful and challenging.
- Assessment tasks need to be meaningful and engaging to students so they will be motivated to show their capabilities.
- Tasks should be instructionally related and teachable. Overall, they need to represent skills and knowledge that students can acquire.
- Assessment tasks should be feasible for implementation in terms of space, equipment, time, and costs (Linn, Baker, & Dunbar, 1991).

Alternative assessments also offer an attempt to realistically deal with the knowledge explosion. In this century, knowledge has quadrupled (Cornish, 1986). Such a surge of new knowledge makes it futile to have students memorize and recite large bodies of facts. The current shift from a manufacturing to an information-based economy requires that individuals have skills in accessing and using information. Students need to have experiences in receiving

information, interpreting it, connecting it to what they already know, and reorganizing their internal conceptions of the world. Alternative assessments offer students the ability to be actively involved in their learning. Alternative assessments provide experiences for students to reflect, construct, and self-regulate. To know something is not just to passively receive information, but to interpret and incorporate it. Instead, these assessments require students to organize, structure, and use information in context to solve complex problems (Herman, Aschbacher, & Winters, 1992).

In addition, alternative assessment promotes the role of social context in shaping complex cognitive abilities. Most real-life problems require people to work together as a group; yet, most standardized tests involve independent work. Alternative assessments, on the other hand, encourage students to work together on portions of tasks. Working together provides models of effective thinking strategies, mutual constructive feedback, an appreciation for the value of collaborating with others, and help in attaining a difficult or complex skill.

Portfolio Assessment

Portfolio assessment is one type of authentic assessment that represents meaningful student work that is reviewed against criteria in order judge an individual

student or program. Portfolios are systematic collections
by both students and teachers. They can serve as the basis
to examine effort, improvement, processes, and achievement
as well as to meet the accountability demands usually
achieved by more formal testing procedures. Portfolios
serve as vehicles for ongoing assessment. They represent
activities, processes, and products.

Portfolios are as varied as the students who create
them. There is no unanimous agreement as to what
information should comprise a portfolio. Some are used to
motivate students, promote learning through reflection,
evaluate curriculum, replace other tests, establish exit
requirements for course work, track growth over time, or
evaluate students' thinking. Whatever the purpose,
selecting the goals for the portfolio will shape the
assessment. The criteria for selecting goals should include
the following:

- They should capitalize on the best each student
  has to offer.
- Assessment should be an ongoing part of
  instruction.
- Assessment should inform the instruction.
  Teachers should learn from portfolios not only
  what to teach but also how and when to teach it.
- Assessment is multidimensional, including

cognitive, affective, and social processes.

- Assessment is authentic. Students should be
  assessed while they are actually involved in
  their learning (Valencia, 1990).

Portfolio Guidelines

The guiding idea behind portfolio assessment is to
provide more opportunities for richer, authentic assessment
of student achievement. Educators who use portfolio
assessment can learn a great deal about what students are
able to do when they have adequate time and resources. It
permits instruction and assessment to be integrated into a
meaningful experience for students. Portfolios can become
the window into students' minds, a means for both the
students and the teacher to understand the educational
process that students undergo. It can be a motivating and
powerful tool for encouraging students to take ownership in
their own learning. Creating the integration of instruction
and assessment through portfolios requires careful and
methodological planning by the teacher. The following
guidelines were discussed at the Northwest Evaluation
Association conference on portfolio assessment in 1990:

- The end product should contain information that
  shows that the student has engaged in self-
  reflection.
- Students must be involved in selecting the pieces to

be included in the portfolio. Selecting the individual pieces provides opportunities for the students to learn to value their own work.

- Portfolios are separate from student work folders. They are not folders that contain every piece of work that the student has completed. Selections for the portfolio must be determined by the purpose of the portfolio and the context of other exhibits found there.

- The portfolio contents should include the following components for the entries: (1) rationale or purpose; (2) intents or goals; (3) contents; (4) standards; and (5) judgments about the contents.

- During the year, a portfolio may serve a different purpose from at the end of the year. At the end of a year, the portfolio may only contain materials that the student is willing to make public.

- The goals of the portfolio should not be in conflict with each other. Students, teachers, parents, and others who may review the portfolio should know the particular goals that were established for the portfolios.

- Portfolios should contain information that illustrate student growth. There are many ways to record growth, and the methods selected should be

dependent upon the goals of the portfolio (Paulson, Paulson, & Meyer, 1991).

Establishing portfolios allows for opportunities for teachers to observe students in broader contexts such as developing alternative solutions to problems, taking risks, integrating new concepts into their learning, reflecting on their progress, and evaluating their work. The guidelines provide a framework for establishing portfolios in order for the portfolio to be a complex and comprehensive record of student performance.

Varied Use of Portfolios

The use of portfolios as a way of assessing student progress differs from teacher to teacher and from school to school. Classroom teachers tend to approach portfolio assessment from different points of reference. There is no single path or particular way to develop or use portfolios. As the concept of portfolios becomes more widely recognized, the variety of objects and processes which have been labeled as portfolios will continue to grow. Currently, portfolios are used for a variety of purposes from assessing a state's language arts and math program, developing students' identities as artists, promoting students' self-esteem, promoting students' reflections, investigating students' interests, demonstrating versatility in content areas, illustrating refined skill in one particular area, to

documenting strategy-based learning.

Deciding how and when documents go into students'
portfolios is dependent upon the nature of the portfolio.
The contents can include a variety of products: classroom
assignments, finished or rough drafts, self-reflection,
observations by others, and student work created especially
for the portfolio. Some teachers select student work
samples to be included in the portfolio; while other
teachers encourage students to select their pieces. Still,
other teachers jointly select pieces with the collaboration
of students. Further, some portfolios have pieces included
monthly, while others have pieces selected quarterly or
periodically.

When selecting pieces for the portfolios, teachers vary
in their expectations. Some require all work leading up to
and including the "final piece". Others only require a
final showcase sample. Overall, the approach to collecting
and documenting student work samples for the portfolios
depends upon the goal that the teacher has in mind.

Problems with Portfolio Assessment

The widespread implementation of portfolios remains a
problem. There are many theoretical and practical problems
associated with the process of judging the quality of a
portfolio; others dealing with the sheer bulk and
cumbersomeness of various forms of student work; and more

issues in verifying a student's work. On one hand, there is a push for national standards; and, on the other hand, there is a need for local flexibility. The process of developing portfolios does not contain uniform data. The challenge with portfolios comes with the attempt to use them as formal measures of educational change (Tierney et al.,1991; Wiggins, 1992).

Several different approaches to scoring students' portfolios on a large-scale have been attempted. In Rhode Island, Educational Testing Service (ETS) has recently assisted teachers with developing a portfolio program to assess the validity of the state's third-grade writing test. The students wrote descriptions of themselves and classmates, commercials, and letters. In reviewing and assessing the portfolios, ETS found that the portfolios were not an excellent predictor of students' performance except at the bottom range of the scale (Fowles, 1989).

The National Assessment of Educational Progress (NAEP) has recently begun exploring portfolio assessment as a means of assessing student writing activities. NAEP conducted a pilot portfolio study in 1990 to explore the feasibility of conducting large-scale assessments using school-based writing. A national representative subgroup of fourth and eighth graders were selected to create the "Nation's Portfolio." NAEP analysis of these samples provided

information which will be incorporated into the 1992 assessment. Specifically, the new 1992 writing assessment will include an expanded time allotment, planning page to encourage students to plan their responses, and provide assessments related to informative, narrative, and persuasive writing. At this point, there still remain difficulties developing descriptive criteria which will provide useful information about students' writing activities. The 1990 pilot demonstrated the need to include all student work leading up to, and including, the final writing piece. In this pilot, many teachers did not send student evidence of the use of process strategies, first drafts, revisions, or many descriptions as to the purpose of the assignment. As a result of this preliminary work, there is further information needed as to the direction for portfolio assessment. This pilot indicates the need for a more systematic method of collecting writing samples to determine the types of classroom writing activities that students are engaging in during the year. Likewise, there is the need to include evidence or information about the use of process strategies and revision techniques used by the students.

In this study, teachers were asked to select a variety of types of writing to include for the project, yet NAEP received very few different types of writing. One possible

solution to this problem is to specify the writing activities, describe the scoring components, and establish a fixed period of time for students to use to complete their writing prompts (Gentile, 1992). Portfolio assessment programs that utilize students' classroom-based writing have the potential for large-scale assessment if the writing program involves the students in a broad range of writing activities. The length and quality of the writing could be used to develop and articulate standards for student writing which may involve teachers in both the evaluative and instructional components of the writing program. These suggestions support the need for additional research into portfolio assessment techniques.

NAEP critics have voiced their concern about the 1992 portfolio project. Even with the revisions, critics fear that providing 25-50 minutes for a writing activity is insufficient. Instead, these critics contend that higher-order thinking and writing can only occur when there is an increased focus on a writing process which includes encouraging students to take a lot of time with their writing, to think deeply and become invested in their writing, and to use a variety of resources in their writing (Dyson & Freedman, 1990). Further, the assessors for the 1992 project have not yet decided how to evaluate the portfolios (Freedman, 1991). Another issue of concern for

this project involves the scoring device. Primary Trait
Scoring will be used to set specific criteria for successful
writing on a particular topic ahead of time. The primary
trait is determined and defined by the test maker who
decides what is the one most important aspect of writing
that should be labeled as the "primary" component.

In Vermont, a portfolio pilot was implemented in 48
schools during 1990-1991. This pilot included assessment
for both writing and math of fourth and eighth grade
students. The primary responsibility for the development of
the portfolio components was given to state-sponsored
committees of teachers. Results from the pilot study were
comprised of mathematics portfolio reviewers and teacher
questionnaires. Information that is available is
preliminary and not yet available for public distribution
(Koretz, 1992). However, the interim report indicates that
the raters, a single group of eight specially trained
raters, found it difficult to score individual pieces since
some of them did not match all the scoring criteria.
Another problem encountered was that many pieces were not
accompanied by sufficient documentation from the original
assignment. Additionally, the scale point that had been
devised to be appropriate for individual tasks was
inappropriate for averaging. The response rate of teachers
in the pilot-year survey was low. Data collection

strategies were revised for the 1991-92 state-wide

implementation. Nevertheless, suggestive findings indicate

that the teachers who responded had concerns over the amount

of time required to produce work for the portfolios,

possible misconceptions over the quality of students' work

(portfolios pieces may not indicate the student's true

abilities), and ownership (some students worked in groups

and an individual's entry may not have been his or her own

work).

Raters indicated that the following were the least

successful elements of portfolio scoring:

- Difficulty in scoring so many pieces.
- Difficulties with specific criteria.
- Difficulties with the nature or presentation of
  tasks.

The RAND Corporation, as part of the Center for

Research on Evaluation, Standards, and Student Testing, has

found that "the reliability was low enough to limit

seriously the uses of the 1992 assessment results" (Rothman,

1993). The report from The RAND Corporation suggested that

the low levels of reliability may stem from problems in

training teachers to score portfolios, the criteria for

evaluating them, and the lack of standardization of tasks.

In response to the findings, state officials and

teachers have agreed to redesign the training sessions to

provide more immediate feedback to teachers. In the past, teachers received training during the course of a year, then at the end of the year exchanged their students' portfolios with others raters, who provided them with feedback on their scoring. Under the proposed system, teachers will score portfolios at each training session along with others raters, who will inform them immediately about their scoring. Susan Rigney, director of the assessment program in Vermont (1993), stated that a key feature in the program is to have every teacher trained and skilled in using the scoring system. However, at this point in time, a select group of raters is being used as an interim remedy.

Arts PROPEL is another portfolio project which has resulted in the need for further research into portfolios. This project is funded by the Arts and Humanities Division of the Rockefeller Foundation and Harvard Project Zero, the Educational Testing Service, and the Pittsburgh, Pennsylvania public school system. Arts PROPEL focuses on three areas -- music, visual arts, and imaginative writing. In this program, students are expected to explore their discipline through the following process: portfolio review; pivotal pieces; companion pieces; and footprints (Brown, 1989). The portfolio review is continual and occurs on an ongoing basis, providing students the opportunity to become apart of the evaluation. Pivotal pieces are those that have

provided students with new insight or sense of direction.

Companion pieces are twofold. They can be pieces that develop as an outgrowth of class critique or projects that involve the same idea constructed in different ways. Footprints involve returning to pieces done in the past. Students proceed through various phases, but there is no standard portfolio process. At this time, little has been written about the summarizing and reporting of PROPEL portfolios. This remains an area for more development.

Another project involving assessing portfolios is the Apple Classrooms of Tomorrow (ACOT) in Ohio. During 1989-1990, three teachers in grades 1, 3, and 4 participated in the project focusing on assessment of students' writing. This project involved the following five key aspects:

- Classroom writing - Portfolio samples were students' classroom writing, rather than responses to a prompt.

- Multiple samples over time - Samples were collected over time, rather than responses collected at a single administration.

- Task variation - The samples included different genres and multiple topics.

- Writing process - Many of the portfolio samples had undergone repeated revision.

- Supplemental materials - Student self-reflections,

parents' assessments, and teacher-student conference notes were included.

The results of this study support holistic/analytic rubrics for assessment and provide the subscales which reflect teachers' objectives for their students' growth and competence. Raters raised a number of concerns about the scorability of portfolios. The contents of portfolios need to be structured to suit the purposes of the assessment. They indicated a need to have a description of the tasks assigned to students and of the benchmarks used to evaluate competent writing performance.

In focus groups, the raters raised issues surrounding the design of portfolio assessment. They believed that an analytic rubric could be used if the subscales for assessment would reflect teachers' objectives for their students' growth and competence. Further, they expressed the need to provide raters with information regarding teachers' expectations for students' performance. They also requested a description of the tasks assigned to the students and of the benchmarks used to evaluate writing performance (Gearhart et al., 1992).

In designing a portfolio structure for assessment, the rubric should be coordinated with the design of the portfolio collection. In this study, the portfolios were not constructed with those purposes in mind. This study

also specified the need for portfolio structures that can ease the tension between the need for large-scale assessment and those for classroom instruction. A balance is needed between structuring portfolios for assessment demands and developing portfolios for instructional purposes (Gearhart et al., 1992). The study has confronted the issues and complexities entailed in developing methods of large-scaled portfolio assessment. According to results from this study, there is a need to develop a coordinated framework to describe the relationship between curriculum and assessment design. While it is reasonable to assume that there is no single solution to the multiple formats and purposes being advocated for using portfolios in and out of the classroom, it is recommended that multiple prototypes be developed to accommodate the individual and unique needs of schools.

Another issue raised related to large-scale assessment. Both teachers and raters in this project indicated that large-scale portfolio assessment will require comparability of portfolios across classrooms and contents to support credible assessments. Whatever the solution, it is clear that no set of criteria for teacher-selected portfolios for external evaluation can be developed without a developing a coordinated framework to articulate the relationships between curriculum and assessment design (Gearhart et al., 1992).

This particular study has highlighted the need to
create an assessment of portfolios that inform teachers'
curriculum and instruction without limiting them, that
permit student construction, and yet is sufficiently uniform
in structure and content to make possible meaningful
comparisons among students.

The need for further investigation of portfolio
assessments is also suggested by Bird (personal
communication, cited in Wolf, 1991). He raises the need for
a "middle ground" in portfolio assessment to ensure that the
portfolio is somewhat standardized and comprehensive, yet is
inclusive of all teaching styles and situations. This same
notion for evaluation is supported by Edgerton, Hutchings,
and Quinlan (in press). They contend that many details of
portfolio evaluation are not worked out, and that the
evaluation could take many forms. The key, from their
perspective, is to keep in mind the purposes of the
evaluation, and the develop some sort of standardization to
help make the portfolio more interpretable and to allow
comparisons across portfolios.

Portfolio evaluation can take many forms and the need
for further investigation is well documented by many
researchers. Performance standards that include qualitative
statements so that stakeholders can make judgments about the
materials found in the portfolio is necessary (Wiggins,

1992). Performance criteria, instruments, and tasks need to
be established in order to determine the degree to which a
student has obtained the objective or learning goal (Gelfer
& Perkins, 1991). The span of techniques range from open-
ended, spontaneous, individualized work samples which can
result in inconsistencies in evaluating student work to an
approach in which all of the pieces for the portfolio are
specified by someone other than the teacher and student.
This later type of approach removes the overall purpose of
portfolios -- to have students and teachers actively
involved in selecting work samples that reflect the
students' growth.

Portfolio Organization

Because the nature of the portfolio will vary depending
upon the goals and the students, it is difficult to
establish exactly what should and should not be included,
and how and when it should be evaluated. However, the
following organizational strategies may make a portfolio
more useful and manageable (Valencia, 1990):

- Planning for portfolios - The decision about what to
  include should grow out of curricular and
  instructional priorities. These goals should be
  broad, not overly specific or involving isolated
  skills or individual lesson objectives. If the
  goals of instruction are not specified, portfolios

have the potential to become unfocused. It is also helpful for teachers to determine how they will help students meet the instructional goals and how they determine if progress has occurred. Articulating what instructional goals students should obtain will assist in determining the format of assessment.

- Including contents in portfolios - The portfolio contents can be organized into the following two layers: (1) actual work samples, or raw data that the student has completed; and (2) an organizing framework to help synthesize the student data. This framework will help teachers examine students' work and to make decisions based upon the achievement or progression toward the goals.

- Managing the contents - Selecting and documenting student portfolio contents provides great flexibility for the teachers. Such flexibility may also be one its greatest weaknesses. Portfolio assessment has raised some concern among educators over reliability, inconsistency, and inequity across classrooms, schools, and districts. In response to these criticisms, the following strategies are suggested: (1) determine the goals for instruction and assessment in order to build a common understanding of criteria; (2) collect several

measures for each goal, the more measures that one

has, the greater the reliability of the conclusions;

and (3) include two levels of assessment evidence -

required and supporting evidence. Required evidence

provides a way of looking systematically across

students and well as within each student.

Supporting evidence may be selected independently or

collaboratively by the student and the teacher. It

is critical to building a complete picture of a

student's abilities. It adds the depth and variety

that standard assessment lacks.

- Using portfolios for decision-making - The portfolio

  can provide valuable information throughout the

  school year related to a student's progress. During

  the year, the teacher and student can review the

  contents of the portfolio to discuss progress,

  reflect on its contents, and plan for the inclusion

  of other pieces. At the end of the school year, the

  portfolio can provide valuable information about the

  student's attainment of the designated goals and

  actual evidence of learning that can be used by

  school administrators.

Cognitive Thought Processes that Impact Teachers' Planning and Decision-Making

Research on the thought processes of teachers relies on the following beliefs: (1) teachers are rational professionals who make judgments and carry out decisions in an uncertain, complex environment; and (2) a person's capacity for formulating and solving complex problems such as those presented in teaching is very small compared with the enormous capacity of some ideal model of rationality (Clark, 1978; Shulman & Elstein, 1975; Shavelson, 1973). Generally, teaching requires immediate rather than reflective responses which may preclude rational processing of information in making an informed judgment or decision. Further, a teacher generally constructs a simplified model of the real situation. The teacher, as a result, behaves rationally with respect to the simplified model of reality. In reacting to situations, teachers' thoughts, judgments, and decisions guide their classroom behavior. Their intentions are directly linked to their actions (Shavelson & Stern, 1981).

Planning that teachers undertake has a profound influence on their classroom behavior and the outcomes of the lesson. Planning is one component of teaching that is usually carried out without the presence of students. Teachers' instructional plans serve as "scripts" for

carrying out the interactive teaching (Shavelson & Stern, 1981). Scripts exert a strong influence on teachers' delivery of instruction and they are usually not changed once they have been developed (Joyce, 1978; Peterson, Marx, & Clark, 1978; Zahorik, 1970).

Until recently, most of the research on teacher planning has focused on a means-end model proposed by Tyler (1950). The means-end model involves the following four steps to effective planning: (1) specifying the behavioral objective; (2) specifying students' entry behavior; (3) selecting and sequencing learning activities; and (4) evaluating the lesson outcomes. However, current research on teacher planning has found that Tyler's model does not reflect the actual planning process. Even though there is not an established a "planning model", current research has identified components that must be incorporated into the planning process (Taylor, 1970). The instructional activity or "task" tends to be the basic unit for planning (Clark & Yinger, 1979; Yinger, 1979; Peterson et al., 1978; Zahorik, 1970). Planning the instructional activity involves identifying the content, materials, student activity, general goals, student needs, and grouping needs. The overall main goal of planning is to maintain a smooth flow of instruction. Therefore, plans are rarely changed once they are formulated.

Current research has produced little information about how learning activities are actually constructed. Yinger (1979) found that teachers' activities are influenced by routines which are completed on a monthly, weekly, or daily format. Yinger's study revealed that the activity is approached from a three-stage problem-solving task including (1) problem finding where content, goals, experience, and knowledge combine to yield an initial conception of an activity worthy of consideration; (2) progressive elaboration of the activity; and (3) activity implementation emphasizing evaluation and routinization to the teacher's repertoire of knowledge and experience, which in turn play a major role in future planning processes.

Shavelson and Stern (1981) in reviewing teachers' preactive teaching processes found the following:

- The instructional task or activity is the basic instructional unit for planning.
- Teachers' main focus for planning involves the task.
- Teachers are more concerned with selecting appropriate content than with the general structure of the subject matter.
- Within the instructional task, teachers consider the content, activity, goals, and students.
- Student ability is considered when teachers are planning instruction.

The instructional planning conducted by teachers influences the decisions that are made. The plans, often mental in nature, serve as the catalyst for interactive teaching. Teachers' images or plans are often routinized to reduce the number of decisions to be made during a lesson (Joyce, 1978). Routines generally reduce the amount of information that teachers have to consider and the number of decisions that they have to make.

Both preactive and interactive decisions have been studied by Peterson, Marx, and Clark (1978), and Yinger (1979). These researchers describe preactive decisions as those decisions that a teacher makes prior to instruction. On the other hand, interactive decisions are those decisions that a teacher makes during the instruction (Peterson et al., 1978).

Interactive decisions have been characterized as "inflight" or "real time" decisions since teachers do not have time to reflect upon these decisions or to seek additional information before deciding upon a course of action (Shavelson, 1983).

Teachers tend to make decisions during their teaching when the lesson is not going as planned. A lesson is judged problematic when there is a lack of student involvement or when behavior problems surface. Teachers may choose to change a lesson, but they are more likely to only make minor

adjustments. In many cases, teachers will wait and deal with the problem in future plans.

Though conscious decision-making is reduced during interactive teaching, teachers do make decisions. Generally, teachers make about ten interactive decisions per hour, which usually focus on the fine tuning of their original plans. In making decisions, teachers frequently consider only a few alternatives and tend not evaluate them critically but rather to seek confirmation by students for their choice (Shavelson & Stern, 1981).

At the present time, there have been no studies that specifically dealt with teachers' cognitive processes in planning and making instructional decisions related to portfolio assessment. However, the thought processes used by teachers related to their instructional responsibilities provide insight into the process that teachers undergo when formulating plans for their instructional programs. Research related to preactive teaching processes provides a structure for future research into the cognitive processes associated with portfolio assessment.

This particular study is important because there has not been any research related to teachers' planning and decision-making processes that are used during the assessment of portfolios. Since a major advantage of portfolio assessment is to bridge instruction with

assessment, it is important to study how teachers, serving as the portfolio assessors, plan, judge, and make instructional decisions based upon analysis of students' portfolios. Documentation of the types and consequences of teachers' decisions as a direct result of monthly portfolio assessment will provide valuable information for educators who are involved with portfolio assessment.

Chapter 3

Methodology

Overview

This was a particularistic case study designed to
investigate how portfolio assessment contributed to
instructional decision-making by fifth grade teachers.
Monthly portfolio analysis and assessment was conducted by
the classroom teachers who served as the assessors.
Therefore, the primary focus of this case study was to
analyze how portfolio assessment contributed to
instructional decision-making by classroom teachers. The
case study included descriptions and observations of
decisions by teachers during their team planning time, focus
of monthly portfolio analysis sessions, instructional
adaptations and curricular decisions, and perceptions of
portfolio assessment by teachers. The monthly analysis of
portfolio writing samples also provided information related
to the progress of students with regard to their writing
abilities. Monthly writing samples provided documentation
of student growth over the school year. Data were collected
through observations, informal and formal interviews,
audiotapes, and document analysis describing instructional
techniques utilized as a result of monthly assessment of
student portfolios.

The Research Issue as a School Focus

The principal, as the researcher, was particularly interested in the types of instructional decisions that classroom teachers made as a result of monthly assessments of student writing portfolios. In the elementary school where the researcher is the principal, the staff had selected to investigate portfolio assessment as one of their school-wide objectives during the 1993-94 school year. Having received an overview of portfolio assessment during an April staff meeting, the teachers unanimously chose to investigate the benefits from developing, maintaining, and assessing student portfolios during this school year. None of the staff members had any previous training in this area.

The 1993-94 school year began with a two-hour in-service session on the components and characteristics of student portfolios. This workshop was led by the reading specialist, kindergarten teacher, and principal who had been researching and attending portfolio workshops during the summer. Follow-up training sessions were scheduled during staff meetings and early-release days. The follow-up training sessions focused on student/teacher portfolio goal setting, student reflections, and assessment techniques.

The main purpose of this study was to examine how monthly analysis of students' writing portfolios affected teachers' instructional decision-making. The researcher was

interested in determining how classroom teachers utilized portfolio assessment in their preactive teaching processes. The monthly assessment of students' writing portfolios provided the teachers with data related to individual student progress toward the benchmarks. The inductively derived benchmarks also served as standards for the monthly portfolio assessments. As a result, teachers were able to adapt, revise, or change their instructional focus based upon monthly assessments of student writing pieces.

Design of the Study

A particularistic case study focusing on four teachers who teach fifth grade were selected for this study. Although all twenty-five classroom teachers in kindergarten through sixth grade were participating in the portfolio project, these teachers were selected to participate in the study. The researcher selected one entire grade-level of teachers, rather than only one or two teachers, since she was interested in the potential for assessing portfolios on a large-scale basis.

The units of analysis for this case study involved the four teachers' classrooms, student writing portfolios, and team meetings. The following areas were the focal points during observations: (a) student mini-lessons conducted by the teachers which focus on instructional strategies related to portfolio benchmarks; (b) student application of various

instructional strategies during their Writer's Workshop period; (c) monthly grade level meetings designed to assess student portfolios and to revise, delete, or develop additional portfolio benchmarks; and (d) teachers' collective decision-making strategies related to instructional planning.

Setting

The setting for this case study was an elementary school located in a suburban area of Montgomery County, Maryland. Six hundred fifty-two general education students in Head Start through sixth grade attended the school. In addition, ninety-two special education students, ages newborn to four, also attended the school.

This elementary school contained twenty-nine general education classrooms: two half-day Head Start sessions, four half-day kindergarten sessions, four classes of first, second, third, fourth, and fifth grades, and three classes of sixth grade. There were seven special education classes including six half-day Pre-School Program (PEP) classes and one half-day Intensity 4 Early Childhood Class.

A variety of resource staff supported the school's many programs. A full-time reading specialist, media specialist, and counselor provided academic support for both teachers and students. In addition, one-and-a-half-time special education resource teachers and speech and language

pathologists served the needs of kindergarten through sixth
grade regular education students. Full-time special
education teachers, speech and language pathologist,
occupational therapist, physical therapist, and a half-time
parent educator provided academic and physical support for
the preschool special education students. All students were
also instructed by one of two art teachers, music teachers,
and physical education teachers.

The school also contained an all-purpose room,
gymnasium, reading room, two resource rooms, two speech and
language rooms, media center, computer lab, think tank,
outdoor science courtyard and wildflower center, art room,
and music room.

The school was the only modular-constructed school on
the East Coast. It was designed to serve the following two
purposes: provide immediate relief for the overcrowding of
nearby elementary schools; and be able to be "moved" at a
later date if demographics so warrant. The school, now
completing its sixth year of operation, still maintains a
glistening appearance through well-maintained grounds,
classrooms, and hallways.

The composition of the school was heterogeneous, with
approximately 66% of the students being Caucasian, 17%
African-American, 11% Asian, and 6% Hispanic.

Throughout the school, teachers work in grade level

teams to plan lessons and units, to make instructional
decisions involving the curriculum, and to coordinate
strategies to promote student success. Teachers meet a
minimum of twice per month in staff and grade level meetings
to discuss instructional issues. However, the majority of
the teams select to eat lunch together to plan and discuss
daily instructional issues.

School Focus

The school's motto, "Strive for Knowledge, Excellence,
and Success", summarizes the vision of the staff members at
the school. This hand-selected group of teachers represents
top quality educators. When the school opened six years
ago, each teacher was interviewed and selected from an
extensive list of potential teachers desiring to teach at
this school. All of the staff members selected shared a
common philosophy for teaching -- creating a school climate
where all students would be successful. Teachers who were
selected for the school displayed a high level of expertise
in differentiating instruction for student needs. They also
believed in a hands-on, participatory approach to teaching
and learning. Visitors who come to the school find the
students actively involved in their learning by
constructing, manipulating, experimenting, creating, and
participating in all phases of their lessons.

A majority of the teachers are also involved in staff

development activities for the school system. Serving as trainers for new teacher training, teacher mentors for beginning teachers, trainers for the new science curriculum, whole language approach, Reader's and Writer's Workshop, and special education inclusion are but a few of the initiatives where these masterful teachers are able to share their expertise with others. Additionally, the reading specialist has earned the respect and admiration of colleagues throughout the state and the nation through her many presentations on reading and writing topics. Overall, the staff represents a high level of expertise, knowledge, and skills related to educating youth.

The teachers are always anxious to participate in new county programs or initiatives which are intended to provide more opportunities for student involvement. During the past three years, the staff has been involved in piloting new science curriculum which emphasizes both a discovery-based approach and a curricular integration format. The staff has also been selected to participate in a new mathematics project which encourages infusion of mathematical concepts throughout the student day. As part of the school's management plan, the staff selected to incorporate both Reader's and Writer's Workshop into their language arts program. These programs provided differentiation of instructional goals based upon individual student needs.

Most recently, the staff chose to investigate student portfolios as a school-wide objective.

Participants

The portfolio project at this school involved all the classroom teachers from kindergarten through sixth grade. However, one grade level of teachers had been selected for this project because of its special interest in portfolio assessment. These classroom teachers taught fifth grade students. They are all experienced Montgomery County (Maryland) Public School System (MCPS) teachers who have taught a wide variety of grade levels.

On this particular team, one member, Debbie, served as the team leader. Debbie had extensive experience in teaching both fifth and sixth grade students for the past fourteen years. She has been at the school since it opened in 1987. She has been teaching reading/language arts, math, and social studies to fifth grade students. This was her first year as the fifth grade team leader where she was responsible for scheduling and conducting bi-weekly team meetings related to school functions.

Diane, another team member, had also been as the school since it opened in 1987. As with Debbie, Diane had taught other grade levels during her twenty-three years of teaching, concentrating in fourth, fifth, and sixth grades. Until this year, Debbie had served as team leader for the

fifth grade teachers. However, with her added commitment of conducting county-wide science training, she selected not to continue as the team leader. Debbie was responsible for teaching reading/language arts, math, and social studies.

Susan, a teacher with eight years of experience, served as the third member of this team. Susan had taught second, third, and seventh grades prior to her experience with fifth grade. On this team, Susan taught reading/language arts, math, and social studies. Susan had been at the school since 1987.

Jennifer, the remaining member of the team, had taught six years. She had previous experience in third and fourth grades. This year, she was responsible for teaching reading/language arts, math, and science. All of Jennifer's professional career has been spent at this school. She was hired directly from college and selected for the school.

The teachers had worked together for a number of years and had developed a supportive, collegial relationship that was built upon trust, sensitivity, and commitment. It was not uncommon for these four teachers to meet daily to plan lessons or share ideas. They often spent their lunch and recess time together as a group, planning new units or developing grade level projects. The teachers also turned to each other for assistance, support, or suggestions. When a team member had questions about alternative strategies for

particular students, needed suggestions for communicating with parents, or needed an honest reaction to an idea, the team always served in that role. Additionally, this team of teachers carried their professional relationships into their personal lives and often would communicate with each other outside of school.

Each teacher instructed a classroom of students who range in abilities, interests, and skills. Each classroom contained 22-24 students who represented a heterogeneous population with regard to ethnicity, gender, academic abilities, social/emotional needs, and behavioral concerns. The students were instructed for reading-language arts by their homeroom teacher. They were re-grouped for mathematics, science, and social studies. However, all teachers planned the curriculum to be covered in each content area to provide consistency and to promote interdisciplinary instruction.

Prior to the initiation of this project, the teachers participated in staff development activities related to portfolio assessment and writing analysis. Teachers received training on the purposes, characteristics, components, goals, and evaluation techniques related to portfolios. In addition to the presentations by the principal and reading specialist, teachers were provided with a variety of articles and other materials related to

portfolio assessment. A professional library was also established in the media center. This library was supplied with various books, magazines, and other publications related to alternative assessment. It promoted easy access for teachers to borrow professional materials. Further, the fifth grade teachers participated in a workshop related to scoring writing samples. Both holistic and analytic scoring procedures were demonstrated for the teachers prior to undertaking a pilot test emphasizing these techniques.

Over multiple sessions, the fifth grade teachers scored sample writing papers using both holistic and analytic assessment strategies. As the training progressed, the discussions among the teachers focused on their interpretations of each writing piece and scoring trait. Through teacher dialogue and hands-on practice, a consensus was reached as to the expectations for each type of scoring.

The students selected for this case study include twenty-four fifth grade students who represent a purposeful or criterion-based sampling. This type of sampling was selected since the researcher was not interested in generalizing from the sample to the population. Instead, she was interested in selecting students who would provide rich information related to this particular case study. The goal of purposeful sampling was based upon the assumption that the researcher wanted to discover, understand, and gain

insight; therefore, the sample selected should be one where the researcher can learn the most (Chein, 1981). During this study, each fifth grade classroom contained a heterogeneous population of students with regard to academic achievement. This designation was based upon report card grades, teacher observations, and gifted/talented testing results. Using an equal allocation method, six students were selected from each classroom. These students represented 25% of each total classroom population and also represented students who were considered high achieving, average achieving, and low achieving.

Framework for Case Study

A framework for collecting and analyzing data should be developed before the researcher begins the official research. The research process should begin with an organizing image of the phenomenon to be investigated (Riley, 1963). The following guiding principles for this case study were directly related to the questions that were being raised, namely --

How is portfolio assessment contributing to teachers' instructional decision-making?

What types of decisions do teachers make?

Can benchmarks be established that will provide direction for large-scale assessment?

Data Sources

Classroom teachers

Reading specialist

Selected students (24 students participating in the
      study)

Student writing portfolios

Student writing folders

Data Collection Strategies

Observations of classroom teachers (during directed
    mini-lessons, Writer's Workshop lessons, and team
    planning sessions)

Structured interviews with classroom teachers and
    reading specialist

Document review (student writing folders, student
    writing portfolios)

Description of the school (focus for school, background
    related to portfolio assessment, student population,
    organizational patterns of school)

Descriptions of teachers' perceptions about portfolio
    assessment and how they were incorporating it into
    their programs

Descriptions of the decision-making process used by
    teachers for determining student needs/strengths
    after reviewing portfolios

Data Collection

Data were collected through observations, audiotapes, structured and unstructured interviews, and documents such as student portfolios, writing folders, teachers' lesson plans, and any other documents related to portfolio assessment. Data were collected and analyzed through a qualitative research approach by the researcher as she performed her duties as principal of the school.

During the classroom observations, the researcher focused her observations on the types of writing mini-lessons that teachers were using and the extent to which students reflected the strategy in their Writer's Workshop writing entries. An observational guide had been developed to structure classroom observations (see Figure 3.1). Data were collected in each of the four classrooms each week during the second semester of school. The researcher spent at least thirty minutes twice per week in each of the classrooms observing the Writer's Workshop. The observations focused on the instructional writing activity, teacher's interactions with students, delivery of lesson, and student writing outcomes. After the observation, the researcher used these notes to develop field notes which were used in the coding and analysis of the data.

Classroom setting:

    Environment:

    Room arrangement:

Mini-lesson:

    Background information:

    Lesson format:

    Lesson content:

    Length of mini-lesson:

    Follow-up from mini-lesson (individual, paired writing, teacher writing conferences, time allocated to writing):

Students:

    Involvement during mini-lesson:

    Involvement during free writing time:

    Selected students application of mini-lesson content:

Other areas:

    Flow of lesson:

    Unanticipated events:

      Figure 3.1 (Observation Guide for Classrooms)

Data were also collected monthly during the team meetings, which were devoted to assessing students' writing portfolios. Each month, the fifth grade team of teachers assessed the selected students' writing portfolios. Monthly writing samples included all of the pieces of student writing leading up to the final document, anecdotal records, and reflections. Each writing sample was assessed by two teachers. During the meeting, an audiotape was used to accurately record the conversation among the teachers and reading specialist as they discussed the strengths, needs, and future focus for students' writing portfolios. Data obtained from these monthly meetings were recorded on a preactive planning form (see Figure 3.2). Monthly portfolio meetings were held in the conference room where the teachers and reading specialist sat around a large table, sharing and displaying student writing samples for other team members to review and assess. The researcher was always present at the meetings and recorded events as they occurred on the preactive planning form. These monthly portfolio meetings provided extensive data related to student progress, appropriateness of portfolio benchmarks, development of additional instructional strategies to meet student needs, and instructional decision-making processes by teachers. This format of monthly meetings where teachers served as the assessors provided the opportunity for teachers to make

decisions regarding student progress and to develop and immediately implement alternative instructional strategies. The team leader usually started the meetings by stating the purpose of the meeting and inviting other team members to share their perceptions of the writing progress for that particular month. Each teacher contributed freely without anyone teacher monopolizing the discussion. The reading specialist contributed to the discussions frequently by sharing research findings or information that she acquired from her professional reading. The researcher responded to questions as they arose from the team. However, she did not initiate any discussion, decisions, or recommendations. Instead, she answered questions that the team posed to her. Usually, these questions related to logistical concerns, rescheduling due to inclement weather, or validation of team-generated decisions or strategies. The team interacted collaboratively by having each member share her ideas, discuss alternatives, and reach consensus related to monthly writing themes. These preactive plans were able to have profound impact student outcomes by serving as the scripts for interactive classroom teaching (Shavelson & Stern, 1981).

Interviews with the classroom teachers were also conducted by the researcher throughout the school year. The interviews varied in format and length but they involved a

Date:

Writing Intent Analyzed:

Format of Writing Selection (student - selected or classroom prompt):

Noted Student Strengths:

Noted Student Weaknesses:

Focus for Instruction:

    Instructional Tasks

    Content

    Materials

    Activities

    Climate

Adaptations to Previously Developed Strategies:

Teacher Comments:

Figure 3.2 (Preactive Planning Form)

[Adapted from Shavelson, R. J. (1982)]

structured format. Six categories of questions were utilized to capture different types of information (Patton, 1980). These cells include the following: (a) experience/behavior questions; (b) opinion/value questions; (c) feeling questions; (d) knowledge questions; (e) sensory questions; and (f) background/demographic questions. An interviewing matrix was developed to incorporate these categories of questions (see Figure 3.3). Each interview was audiotape recorded and note taking focusing on non-verbal behaviors accompanied each audiotape. An interview log was used to capture the main points of each interview (see Figure 3.4).

Data Analysis

Procedures for developing grounded theory are inductively derived and are verified through systematic data collection and analysis (Strauss & Corbin, 1990; Glaser & Strauss, 1967). In this method of research, data were collected, coded, analyzed, and arranged into theoretical categories and properties. The categories and properties were then analyzed further to develop tentative hypotheses for the next step of data collection through a "constant comparative" approach (Glaser, 1978). Data analysis was exploratory as the researcher continued to search for a better fit for the data. Categories become integrated as

Experience/Behavior Questions

What types of instructional strategies have you utilized as a result of assessing student writing samples on a monthly basis?

Please share your experiences and suggestions for assessing writing portfolios on a large-scale basis.

Has your instructional program changed as a result of implementing portfolio assessment? If so, how?

Opinion/Value Questions

What outcomes would you like to have occur as a result of portfolio assessment?

What is your opinion of using portfolios for large-scale assessment?

What is your opinion of the grade level instructional adaptations that have occurred as a result of monthly analysis of student writing portfolios?

What do you see as the value of portfolio assessment?

Feeling Questions

Can you describe your feelings about this year long program?

How do you feel when the team in interacting during the monthly assessment meetings?

Are your comments/ suggestions openly received by other team members?

Knowledge Questions

What have you learned about large-scale portfolio assessment?

How can portfolio assessment affect teachers' instructional decision-making?

What have you learned about developing student benchmarks through the analysis of student writing?

Background/Demographic Questions

Has your prior teaching experiences helped prepare you for this project? Please elaborate.

How have your taught writing in past years?

What other experiences have you had in assessing student writing samples?

Other Questions

Please share with me any other information related to our project that you think would be beneficial for me to know.

Figure 3.3 (Sample Interview Questions)

Name of Interviewee:

Date of Interview:

Location of Interview:

Tape Position	Respondent's Comments	Respondent's Non-Verbal Communication	Researcher's Notes

Figure 3.4 (Interview Log)

[Adapted from Merriam, S. B. (1988)]

new properties were generated and related to existing data.
New categories developed as additional information was
presented. The degree of analysis continued to increase as
the research project progressed and relationships surfaced.
No variables were controlled; instead, control was
maintained by the continuous re-evaluation of data and the
search for completeness of categories.

Process tracing was also used at the team meeting when
teachers discussed the monthly focus needed for the
students. This method of recording teachers' oral planning
as they "think aloud" provided data as to their cognitive
processes. The resultant oral protocol became the data
which were also analyzed (Peterson et al., 1978). In
addition, stimulated recall techniques were used in post-
observations interviews with teachers. This process-tracing
technique enabled the teacher to recall the mental
activities that accompanied the overt behaviors which were
noted in the lesson.

Continuous examination of the protocols for interviews,
observations, and planning occurred. Additional comparisons
emerged as new data and corresponding categories emerged.
Since categories were one element of emerging theory, they
were both analytical and sensitizing (Glaser & Strauss,
1967). A constant comparative method on analysis compared
and generated new categories; linked reduced categories

together by tentative hypotheses; integrated categories, properties, and hypotheses; and developed theory based upon grounded data.

To reduce potential bias since the researcher is also the principal of the school and to enhance validity, the researcher also employed a variety of strategies. Validity was based upon triangulation, member checks, long-term observation at the site, multiple sources of evidence, and the predictive ability of the theory that emerged. In case study research, validity should focus on describing the phenomenon of interest, exposing the complexity of human behavior in the contextual framework, and producing a holistic interpretation of the events (Merriam, 1988).

As a participant observer, the researcher viewed all events leading up to and including the critical moments of data collection. Being on-site enabled the researcher to gather data daily and to use it in interpreting the events. Being at the site for two and one half years has afforded the researcher the opportunity to establish an open, trusting, and caring atmosphere. The researcher was able to collect data that was accurate, valid, and reflective of teachers' beliefs and concerns. The researcher's administrative leadership style involved a strong emphasis on participatory management and on collaborative planning. Teachers were provided with many opportunities to contribute

to the total school program. Their suggestions were encouraged, validated, and acknowledged. Further, a general atmosphere of "we-ness" permeated the building. Teachers shared the decision-making process for the school through participation on various committees which provided feedback to the principal on school-related topics. Additionally, a team leaders' committee was comprised of a representative from each team of teachers. This committee met regularly to share staff input and assist with making school decisions. Even though the school was not designed as a "site-based managed" school, teachers were sought out for their input before decisions were made. There was a general feeling of "we" instead of "you" and "I" between the staff and principal. This collaborative approach enabled staff members to participate in all aspects of the school operation. Further, as a former curriculum specialist, the researcher has established herself as a trustworthy administrator in the school. Teachers, including the fifth grade team, often met with her to discuss ideas for new units, extension ideas, or alternative plans. As the instructional leader in the building, the principal modeled the importance of professional growth. A portion of each staff meeting was reserved for staff training on instructional components. Additionally, after-school curriculum workshops were offered on a monthly basis. The

principal had also arranged for substitute time during the
school day for teachers to attend curriculum training
sessions outside of the school as well as many in-school
training sessions that were generally planned and conducted
by the principal. A love for curriculum development and the
enthusiasm to share her expertise with staff members
resulted in a very open and trusting relationship between
the principal and staff members. Teachers were not
inhibited to talk with the principal about lessons that may
not have gone as planned or about units that may need to be
revised for the next year. On many occasions, the principal
has been requested to visit a classroom to give specific
feedback on a new strategy or instructional technique. A
supportive, collaborative environment enabled the staff
members to openly share their thoughts and feelings
regarding grade level curriculum implementation. Therefore,
the researcher was confident that the lessons, discussions,
observations, and meetings that occurred throughout the year
reflected the teachers' actual thoughts, beliefs, and
decisions. Having established a trustworthiness, the
researcher was able to understand the program as an insider
in the school while describing the program for outsiders.

Reliability in qualitative research involves the
dependability or consistency of the results obtained from
the data (Lincoln & Guba, 1985). In this type of research,

it is more important for the outside reviewers to concur
that the particular results are consistent, dependable, and
make sense. Reliability in case study research is not
focused on being able to replicate the study to produce the
same results. Instead, it is designed to describe and
explain the phenomena that occur. Since there are many
interpretations of events, there are no particular standards
by which one can make repeated measures and establish
reliability in the traditional sense (Bednarz, 1985).
Reliability that ensures the research outcomes are
dependable can be improved through continuous checking and
rechecking, triangulation, constant comparison, verification
from teachers of accuracy of data collected, and use of
multiple data sources. Specifically, in this study,
reliability was also improved through the use of multiple
raters and comparison on writing data over an extended
period of time.

Analysis of Student Writing Samples

In order to generate a baseline of students' writing
pieces for their portfolio, students were presented with a
uniform writing prompt during the month of October. This
prompt was used during the language arts time and was
presented as follows:

> "You have been asked by your teacher to write a
> story about a memorable experience that you have had

in an earlier grade. Be sure to make your story
interesting by including many details about that
experience. Because your final draft will be read
by others, be sure it is clear and complete. Also
check for correct spelling, punctuation, grammar and
capitalization."

Students were then given time to draft, edit, revise,
and finalize their responses. They used up to three class
periods to complete this task. All student responses were
anonymous and coded by student identification numbers.
Before the papers were scored, the teachers reviewed the
process of holistic scoring. It was imperative that the
teachers understood the assessment process and could
successfully interpret each writing sample. Therefore, the
researcher conducted a pilot assessment scoring session.
Each teacher was given ten writing pieces to read and score.
Each paper was then scored by a second teacher who did not
have access to the other teacher's score. Any paper
receiving a holistic score that differed by more than one
score point was rescored by a third assessor. Verification
of the reliability of the writing was included as a
component of the research. Multiple evaluators improved the
overall reliability. After the pilot scoring session was
held, the assessors then scored the student entries. The
papers were scored holistically using the following

guidelines:

(1) Read the paper to obtain a general impression.

(2) In scoring each piece, use the criteria provided.

(3) Assign a score which reflects the overall quality of the paper. The holistic criteria used was adapted from the Evaluation Assistance Center at Georgetown University (1990) and includes the following categories:

5 - Exceptional Writing

- Organization is well developed with clear introduction, development of ideas, and conclusion.

- Vocabulary is precise, varied, and vivid.

- Transition from one idea to another is smooth.

- Very few, if any, mechanical errors that do not disrupt the communication of the writing piece.

- Meaning is conveyed in a highly effective manner.

- Entry is beyond grade level expectations.

- Highly superior writing entry.

4 - Competent Writing

- Vocabulary is satisfactory for grade

level.

- Organization is logical and addresses all parts of the question (prompt).
- Transition is apparent but may be choppy in parts.
- Meaning is understood but may break down at times.
- Entry shows a good understanding of writing topic.
- Few mechanical errors are present.

3 - Transitional Writing

- Organization is simple.
- Vocabulary is simple.
- Transition is often repetitive.
- Mechanical errors affect overall communication.
- Meaning is not completely clear.
- Entry shows some understanding of writing topic.

2 - Emerging Writing

- Vocabulary is below grade level expectations; is very limited, or repetitious.
- Writing contains disjointed sentences.
- Meaning is unclear.

- Mechanical errors cause disruption to flow of paper.
- Entry shows little evidence of writing intent.

1 - Unacceptable Writing

- Response is only a few isolated words.
- No complete sentences are evident.
- No message is communicated to the reader.

0 - No Response or Attempt is Given

Student papers were scored individually by two teacher/assessors. Each assessor scored her papers independently of the other rater. As the papers were holistically scored, a discussion followed which focused on various dimensions that seemed to differentiate the performance of the students. These dimensions emerged as the teachers/raters analyzed individual entries. Specific data surfaced as to the types and amount of student errors. Constant comparative analysis allowed for emerging categories to be compared and integrated and provided a framework for further data collection (Glaser & Strauss, 1967). Throughout this process, student writing samples were analyzed and sorted into categories that emerged as additional writing samples were introduced. As more data were analyzed from the student writing samples, new categories emerged and former ones were modified and

compared with each other. Several main categories emerged that contained subcategories. These main categories provided the foundation for the development of benchmarks. The benchmarks served as the framework for further data collection and analysis. The benchmarks that emerged from analysis of student writing included the following:

- Organized Writing
- Appropriateness of Writing to Assignment
- Style, Tone, and Voice
- Mechanics and Editing

Through dialogue and discussion among the teachers/raters, the need for new instructional practices developed. These strategies were discussed as techniques for promoting opportunities for students to meet the established benchmarks. "Mini-lessons" during Writer's Workshop enabled teachers to directly instruct students on concepts which are addressed as benchmarks. The following chart summarized the benchmarks and the instructional strategies that emerged from the student data:

BENCHMARK	INSTRUCTIONAL STRATEGY (Skill or concept to be taught)
Organized Writing	Use of graphic organizers
	Use of writing leads
	Order of importance, chrono-

	logical order, conclusions Flashbacks Completeness in allotted time
Appropriateness of Writing to Assignment	Awareness of intent, audience Focus on particular topic Experience with various forms of prompts
Style, Tone, and Voice	Use of figurative language Clear, vivid language Varied sentence length Varied sentence formation "Show-not-tell" approach Avoid excess (dialogue, metaphors, paragraphs)
Mechanics and Editing	Correct format Types of sentences Word usage Verb agreement Subject/verb agreement Dialogue Punctuation Capitalization

Data were collected and analyzed monthly using each benchmark through a dimensionalized format. Since time and money were two factors that need to be considered, all students participated in the writing activities; however, only the students selected for the research project had their writing portfolios analyzed monthly. Each writing sample continued to receive a holistic score which represented the overall quality of writing for that particular entry. This score was assessed and recorded as each teacher read and responded to the entire piece. In addition, each writing sample was scored on an analytic scale that provided both qualitative and quantitative data. The analytic scoring procedures provided the teachers with specific diagnostic information about each student's writing progress. The dimensions for each benchmark were represented on a four point scale which utilized the analytic system developed by the Vermont Portfolio Assessment Program and the rubrics established by the Maryland State Department of Education for use with the Maryland State Performance Assessment Program. The analytic rubric developed by UCLA Center for the Study of Evaluation and used in the Apple Classrooms of Tomorrow Project was also used for its subscale related to mechanics. A sample recording form was then created to examine the amount and type of student growth in relation to each of the

established benchmarks (see Figure 3.5). Each sample of
student writing was assessed independently by two assessors
using the following analytic scale:

BENCHMARK   DESCRIPTION

Organized Writing   4   "Extensive"

                            • Writing is
                              consistently developed
                              into a well-developed
                              whole

                            • Ideas are purposefully
                              ordered

                            • No digressions

                            • Varied transitions

                            • Smooth, logical
                              transitions

                        3   "Frequent"

                            • Writing is partially
                              developed, but the
                              response is not a
                              complete, well-
                              developed whole

                            • Ideas are purposefully
                              ordered

                            • Slight digressions

                            • Transitions may be

WRITING ANALYSIS

Intent _____   Student _____

Bench Mark	PTS.	Instructional Strategy (skill or concept to be taught)	Comments
Organized Writing		Use of graphic organizers Use of writing leads Order of importance, chronological order, conclusions Flashbacks Completed in allotted time	
Appropriateness of Writing Assignment		Awareness of intent, audience Focus on particular topic Experience with various forms prompts	
Style, Tone, and Voice		Use of figurative language Varied sentence length Varied sentence formation "Show-not-tell" approach Avoid excess (dialogue, metaphors, paragraphs)	
Mechanics and Editing		Type of sentences Word usage Verb agreement Subject/verb agreement Dialogue Punctuation Capitalization	

Figure 3.5 (Writing Analysis Recording Form)

repetitive, but are
logical

2   "Sometimes"

- Writing is not well-
  developed and is not
  complete
- Ideas are ordered but
  there are some
  interruptions in the
  flow
- Some digression or
  overelaboration
  interfering with
  reader understanding
- Transitions begin to
  be used

1   "Rarely"

- Writing is not
  developed into a
  complete whole
- Little purposeful
  ordering of ideas
- Significant
  interference with
  reader understanding

		• Few transitions
Appropriateness of Writing to Assignment	4	**"Extensive"**
		• Writing answers the audience's need
		• Effectively orients reader to subject
		• Exceptionally consistent writing toward subject
	3	**"Frequently"**
		• Writing answers the audience's need
		• Orients reader to subject
		• Generally consistent writing toward subject
	2	**"Sometimes"**
		• Writing attempts to anticipate the audience's need
		• Very little orientation to subject
		• Inconsistent writing toward subject

	1	"Rarely"
		• Writing has not anticipated or answered the audience's need
		• No orientation to subject
		• May be too brief to determine consistency toward writing
Style, Tone, and Voice	4	"Extensive"
		• Writing uses language choices to enhance the text and in a manner appropriate to the literary form
		• Details create clear, vivid images
	3	"Frequently"
		• Writing frequently uses language choices to enhance the text and in a manner appropriate to the

		literary style
		• Most details create clear, vivid images
	2	"Sometimes"
		• Writing sometimes uses language choices to enhance the text
		• Clear, vivid images may be adequate in places and absent in others
	1	"Rarely"
		• Writing seldomly, if ever, uses language choices to enhance the text
		• Little, if any, clear, vivid images
Mechanics and Editing	4	"Extensive"
		• One or two minor errors
		• No major errors
	3	"Frequent"
		• A few minor errors
		• One or two major

errors

- Errors do not cause
  significant reader
  confusion

2   "Sometimes"

- Some minor errors
- Some major errors
- Errors cause reader
  confusion

1   "Rarely"

- Many major and minor
  errors causing reader
  confusion
- Difficult to read

The scoring rubrics were used to provide an overall
indication of a student's growth and development. Each
writing piece received two sets of scores; one from each of
the assessors. Additionally, anecdotal notes from the
teachers provided a more detailed, descriptive analysis of
each student's progress. Student writing samples were
analyzed in both narration and persuasion throughout the
school year. Students responded to both genres in the
following two formats: core responses (standard prompts
that all fifth grade students will complete); and individual
student selected pieces representing the designated genre.

Within each format, students were given three days to complete each writing piece. The time allotted was used for students to take each piece of writing through the writing process. Data collection occurred monthly throughout the school year according to the following schedule:

October: Narrative Writing Piece (focused prompt to provide core writing samples)

Nov/Dec: Persuasive Writing Piece (focused prompt to provide core writing samples)

January: Narrative Writing Piece (student selected from classroom writing folder)

February: Persuasive Writing Piece (student selected from classroom writing folder)

March: Narrative Writing Piece (focused prompt to provide core writing samples)

April: Persuasive Writing Piece (focused prompt to provide core writing samples)

May: Narrative Writing Piece (student selected from classroom writing folder)

June: Persuasive Writing Piece (student selected from classroom writing folder)

Chapter 4

Results

Introduction

In this chapter, an analysis of the data that were
collected for this study will be presented. The purpose of
this study was to investigate how portfolio assessment
contributed to instructional decision-making by fifth grade
teachers. The dual role of teacher as instructional leader
and assessor was examined. Data were collected from
classroom and team observations, formal and informal
interviews, document analysis, audiotapes, and team planning
sessions. A summary of the major findings is presented in
this introduction with supporting data comprising the
remaining sections of this chapter.

This study demonstrated the empowerment and autonomy
that teachers developed during their year-long experience
with portfolio assessment. Teachers assumed ownership in
their own professional growth through cognitive exploration
activities. Teachers increased their authority related to
instructional decision-making, initiating self and student
change, and empowering students. Individual and team
problem solving enhanced teachers' motivation, self-
confidence, and professional ambitions. Analyzing student
writing samples and creating benchmarks inductively derived

from their own students' writing samples provided teachers with an active role in determining the instructional focus for the school year. Rather than imposing an outside evaluator's beliefs regarding instructional programming, teachers were able to develop their own focus for the students, plan lessons specifically related to the benchmarks that they created, and assess student progress on a continuous basis. The teachers increased their level of decision-making through collaborative idea sharing, brainstorming sessions, and peer encouragement. As a result of their active empowerment, teachers internalized their decision-making abilities related to portfolio assessment and transferred these skills to other curricular areas.

The transfer of instructional strategies and processes to other curricular areas became visible near the end of the study. The change in teachers' instructional practices was gradual and evolutionary. The decision-making processes that the teachers underwent were dependent upon the situations at hand. Each decision that was made by the team of teachers was directly related to their analysis of student progress as documented in the students' portfolios. The monthly portfolio assessment sessions served as the catalyst for change. The teachers, serving as the actual change agents, developed instructional adaptations and modifications based upon specific areas of student strength

and need. This evolutionary process resulted in changes in the following areas: instruction, assessment, attitude, student expectations, and philosophy. The most visible changes occurred in instruction and assessment. The integration between the two areas resulted in authentically designed experiences for students. Using data related to student needs which were grounded in actual writing samples enabled the teachers to develop instructional strategies that addressed areas of concern. Throughout the year, there was a shift in cognitive exploration techniques from very concrete, lower level strategies to very abstract, higher level techniques. Teachers moved from developing weekly mini-lesson topics early in the school year to facilitating students' self-reflection and assessment techniques.

The changes in instruction that the teachers developed were embedded with process-oriented goals. As the year progressed, teachers shifted their expectations for decision-making from self-ownership to student-ownership. As students assumed responsibility for assessing their progress, teachers adapted their philosophies and attitudes. Instead of viewing themselves as the sole evaluators responsible for documenting student progress and recommending follow-up measures, they came to view themselves as facilitators or coaches. They placed an increased emphasis on imparting strategies for students to

use to affect and direct their own learning.

This study also revealed additional findings related to the preactive planning processes undertaken by these teachers. The task or instructional activity remained the primary focus for their planning (Shavelson & Stern, 1981). However, as the year progressed, the teachers shifted their emphasis from very specific, detailed lessons to much larger, multidimensional tasks. The incremental planning related to specific cognitive tasks that occurred during the fall and early winter had been transformed into complex, higher level tasks emphasizing student empowerment throughout the learning processes by the late spring. A socialization process emerged whereby students gradually assumed more ownership and direction for their own learning. The transfer of power from the teachers to the students was deliberate and well planned. An integrated instructional/assessment system was developed for the students which paralleled the system that was created and used by the teachers. Students were provided with preactive decision-making strategies to assist them in their planning prior to task completion. Through incremental stages, students assumed responsibility for assessing, evaluating, and recommending follow-up techniques for peers and for themselves. A complex system developed where students initially served as the receivers of various writing mini-

lessons and then built upon those skills to verbally assess
components of classmates' reading responses. Their initial
assessments were based upon the established criteria related
to the benchmarks. Later in the year, students inductively
derived their own persuasive writing benchmarks based upon
their classroom writing activities. After creating their
own benchmarks and rubrics, the students together assessed
their classmates' writing pieces, providing justification
and support for their holistic assessments. Working in a
collaborative setting encouraged social, cognitive, and
affective skill refinement. As a final step toward student
empowerment, metacognitive strategies were encouraged by
having each individual student evaluate his own progress by
providing both quantitative and qualitative documentation
along with each student's personal reflections and future
writing goals.

Background

Assessment of authentic portfolio writing samples was
conducted monthly by the team of fifth grade teachers who
served as both the teachers and the assessors. The monthly
assessment provided the teachers with student data related
to individual progress toward the established portfolio
benchmarks. Consequently, this study examined the
adaptations, revisions, or changes that teachers developed
as a result of their role as assessors. The usefulness of

inductively derived portfolio benchmarks as an instructional tool was also examined.

Results from observations, interviews, team meetings, and document analysis provided the framework for data collection and analysis. The results from this particularistic case study are provided in the following sections.

Preactive Thought Processes

The research on the fifth grade teachers preactive thought processes involved an analysis of the teachers' planning processes related to the development of instructional strategies and techniques that were incorporated into the writing lessons as a result of their preactive and interactive decisions related to their analysis of student writing portfolios.

The focus of this part of the study was to examine the results related to the teachers' planning processes. Analysis of observations, interviews, and audiotapes provided the basis for these results. Observations and audiotapes were used to collect data during team meetings and portfolio analysis sessions. Interviews with teachers after instructional observations also were used for data collection.

Observations of teachers' preactive planning processes revealed a wealth of information related to instructional

decision-making by teachers. These processes directly impacted the instructional program that was delivered by the classroom teachers.

The investigations of preactive planning strategies by the teachers indicated several phenomena: (a) team meetings and portfolio analysis sessions were characterized by intense team discussions which resulted in collaborative decisions; (b) teachers tended to develop new instructional programs later in the year after implementing alternative strategies; (c) teachers implemented the agreed upon instructional adaptations or additions in an individual manner; and (d) teachers incorporated their preactive planning and decision-making into other curricular areas.

It was very clear early in the study that the teachers approached planning from the "task" point of view (Clark & Yinger, 1979; Yinger 1979; Peterson et al.). The particular monthly type of writing sample served as the "task". Teachers utilized the student information from the monthly portfolio analysis sessions as background planning data for determining how and what to instruct students with regard to the "task".

The monthly portfolio analysis sessions provided the teachers with opportunities to analyze and evaluate student writing samples. Even though the teachers were masterful at analyzing individual student writing, conferring with

students, and monitoring individual progress, they did not have a systematic method for assessing needs and strengths of portfolio samples. The development of portfolio benchmarks provided a framework for teachers. During the first half-day scoring session, teachers categorized the students' writing needs and strengths. Teachers described the various student entries according to individual components. Teachers described student writing samples as "overuse of dialogue," "great lead," "completely unable to be deciphered," "great use of a pre-writing strategy but no carry over," "a real need for pronouns," "no supporting information is present," "fits the specified intent beautifully--excellent thoughts communicated," and "did not support his ideas as all."

Through the continual classification and reclassification of student writing samples, the teachers developed an assessment schema which evolved into the creation of the portfolio benchmarks. After the benchmarks had surfaced inductively, teachers communicated a "sense of purpose" for the year. One teacher expressed her excitement for inductively establishing benchmarks based upon actual student needs as "I have a clear direction to guide my writing instruction for this year." The three other teachers acknowledged their support for the creation of student benchmarks both verbally and nonverbally. Included

among the comments were remarks such as "this is the first time in many years that I feel that I really know what my students actually need in writing," "this is the best thing that we've ever done for student writing," "I'm really excited--I know exactly what I am going to teach in writing mini-lesson this year!" At one point, one of the teachers jumped from her chair and exclaimed, "this is definitely the way to go!" Teachers expressed a sense of ownership for both the portfolio benchmarks and for the direction of the writing program.

As the year continued, teachers supported and used the benchmarks to guide and provide focus to their instruction. The benchmarks served as a catalyst for teacher discussions and decision-making. Teachers used the benchmarks to initiate discussion with other team members related to instructional writing techniques. Teachers, working together, brainstormed ways of addressing student needs. Instructional strategies that corresponded to each benchmark were created. These strategies were discussed by the teachers, examples given, and suggestions for writing "mini-lessons" developed. A common sharing of ideas and planning for lessons occurred throughout each session. The teachers spent a great deal of time outlining scripts to serve as plans for their interactive teaching. A discussion among the teachers identified and clarified the instructional

techniques. When the team was discussing how to improve
"Style, Tone, and Voice," a list of instructional strategies
was developed. One concept that emerged was the use of the
"show-not-tell" approach. Examples of this techniques were
shared aloud to establish grade-level expectations. One
teacher gave the following example as a way to "show" fear:
"my palms were sweating," "tears rolled down my face," "my
stomach felt like it was housing a roller derby," and "my
heart was racing so fast that I thought it would explode."
Teachers continually shared ideas, made grade-level plans,
and developed instructional strategies to use with the
students.

The task remained central to the teachers' planning
activities. Specific, detailed activities were later
replaced with more generalized activities. As the teachers
became more confident and familiar with portfolio
assessment, they broadened their preactive decisions to
include more process-oriented tasks. Students also played a
more significant role in the planning process near the end
of the year. Initially, teachers developed lessons and
activities which they used in their daily teaching. The
focus, during the early portion of the year, was on
delivering selected concepts to the students through mini-
lessons. However, through a gradual evolution, the
preactive teaching processes of the teachers increased to

include active student involvement. The task remained the focal point; although, it was discussed within the context of student ownership. A shift from planning specific lessons to planning multi-step lessons emerged. A transfer from the teacher as the single provider for developing lessons to meet individual needs to student ownership and active participation in delivering and designing follow-up activities surfaced.

Types of Instructional Adaptations

Descriptions of instructional strategies, adaptations, and additions as a result of teacher decision-making during monthly analysis of writing portfolios is explained in this section. For this particular study, strategies and adaptations are modifications that are made to the teachers' instructional program. They may include modifications to the lesson format, material, delivery, or content. The results of this study revealed four major categories of instructional adaptations used by the classroom teachers as a result of their assessment of student writing portfolios.

The following sections detail each instructional adaptation that was developed as a result of monthly portfolio analysis. A description of the instructional adaptations as well as any individual teacher implementation differences is provided.

Creation of Monthly Writing Celebrations

During the month of December, teachers met to analyze their students' portfolio writing samples. In this session, teachers discussed the impact of the monthly assessment on their students' progress. During a roundtable discussion, teachers noted that students' writing was reflecting their monthly writing focus and that students were successfully incorporating that intent into their own writing. Before students wrote in their writing notebooks, teachers provided a directed writing "mini-lesson" on a particular topic. Often the topics varied from room to room and teacher to teacher. In addition, the topics that teachers used were often topics that they had used in past years with different students. In this particular meeting, a discussion developed focusing on the need to develop writing "mini-lessons" that reflect the needs of this year's students. Teachers realized that lessons from past years, as beneficial and excellent as they may have been, may not be relevant for these particular students. Teachers discussed the needs of this year's group of fifth grade students with regard to the benchmarks which reflect current needs. Even with the county curriculum and long range plans, teachers felt the need to establish a more comprehensive approach to teaching writing. The county curriculum outlines the objectives that need to be taught during the school year.

However, it does not mandate the sequential order or address the issue of individual or school differences. Therefore, the teachers unanimously felt the need to plan writing lessons that would be sequential, meaningful, and relevant to this year's class of fifth grade. In discussing appropriate writing "mini-lessons", one teacher exclaimed, "I've got an idea and it just might work. How about we recognize those students that attempt to incorporate our instructional strategies in their writings? We could have some sort of a writing assembly then to reinforce and reward their efforts." The other three teachers immediately acknowledged her suggestion by nodding and responding with comments such as "great idea," "I wouldn't have thought of that," and "I'd give it a try." The group of teachers then brainstormed alternatives for creating the assembly. Each person shared her ideas, often piggybacking on a previous suggestion. After much informal discussion and dialogue among the teachers, a monthly "Writing Celebration" emerged.

Teachers agreed to establish a monthly grade-level assembly to recognize and publicly acknowledge students who successfully implemented the designated instructional strategies into their own writing. Each month the designated instructional strategies would be directly related to the student benchmarks. Teachers discussed ways of selecting student writing to share at the assemblies.

Since all of the teachers use cooperative learning strategies throughout their instructional programs, one teacher suggested allowing the students to decide who would share their writing. The other three teachers liked the suggestion and refined the initial idea and resulted in the following method of selection:

The teacher will select the top five writing pieces from her homeroom that best typify the designated strategy. Each of the five students selected will read his/her piece to the class and the class will vote on the top two pieces. The winning selections will be shared at a grade-level assembly in the all-purpose room at the end of each month.

Throughout this monthly portfolio analysis meeting, the teachers responded to each other is a supportive, collaborative approach. Through collective decision-making, they were able to build upon one member's suggestion of a "rewarding student efforts" to developing a grade-wide monthly assembly. In this particular meeting, the analysis of students' writing samples served as the focal point for teacher discussion and decision-making. The benchmarks, serving as a reminder of student needs and instructional direction, provided the teachers with a common purpose.

Constantly referring to the benchmarks and the corresponding instructional strategies provided a focus for

the teachers. Developing monthly "themes" emerged rather easily from the teachers' planning processes once they determined the needs of the students based upon the inductively derived benchmarks. All of the teachers expressed their confidence with making these decisions. As one teacher expressed in an interview later that day:

"I love having a monthly theme for my writing instruction. It really provides me with the direction that I need. In the past, things had been really free flowing. I finally feel as though I know where I am heading. Plus, I know that for the first time it is in the same direction as the kids' needs. I feel so much better this year. For the first time, I can honestly say that I know where my kids are weak in their writing. Sure, I always knew about some of their individual strengths and weaknesses, but not at the level that I do now. I also really like looking at their progress monthly because I know if I'm on target. If I'm not, or the team isn't, we can always change our focus for the next month."

Classroom observations indicated that the instructional planning related to the "Writing Celebrations" centered on monthly themes. During the month of December, the team emphasized "show-not-tell" in their mini-lessons. In addition, to the directed writing lessons about this

strategy, teachers also individualized their interpretations of this strategy by developing bulletin boards which highlighted tips for "showing" student displays of writing which emphasized a "show" approach, and classroom charts describing the process of "showing your story." Each teacher had a slightly different approach to implementation based upon her particular style of teaching. However, each teacher focused of this theme during the month and often included supplemental visuals and aids to accompany her teaching.

The first "Writing Celebration" assembly was a success. Each class had selected the top two writing pieces that were to be shared with the entire grade level. Public speaking skills were also emphasized by the teachers as the classes prepared to share their winning pieces. During the assembly, students sat attentively listening to each piece that was shared. Students were encouraged to "create the story in their minds" by focusing on the descriptive vocabulary and extensive details that each piece contained. The applause and nonverbal affirmation by the students signaled their approval for this new type of assembly. As students gathered to leave the all-purpose room, comments such as "I'd like one of my pieces to be selected to read aloud," "he had a really detailed story," and "that was a cool story" were heard by the students. After the first

assembly, the teachers met to discuss its success. Each
teacher verbally stated her interpretation of the event.
Comments such as "my class couldn't wait for 1:00 to arrive
today," "I was so proud of them, they really did well," "the
other kids really were a good audience," and "this went
really well, especially for the first time" were recorded.
As the teachers related more of their perceptions of the
assembly, they collaboratively decided to increase the
number of students selected from each class. No "absolute"
number was determined; instead, the team decided to allow
each class to increase its number of presenters by two or
three. Each teacher would expand her number based upon the
entries submitted, length of paper, and focus for the
meeting. With student motivation for the assembly being
very positive, the teachers' goal was to actively involve
more students.

The monthly "Writing Celebrations" continued throughout
the year. The focus of the January celebration resulted
from the need to instruct students of organizing their
writing using "leads." Teachers, once again, planned
strategies for delivering instruction for writing "mini-
lessons" using this format. The monthly assembly expanded
to include four or five students from each homeroom.
Teachers agreed that a total of fifteen to twenty student
presentations was the maximum number to be included while

still maintaining student interest and attention. This month's assembly was conducted in the front hallway near "Noble's Courtyard," a large carpeted area containing many plants, shrubs, evergreen trees, and goldfish ponds. The assembly began fifteen minutes earlier than the December assembly since more students were presenting their selections. Even though the environment was more aesthetically pleasing, it was more difficult to hear each student. The fountain in the goldfish pond as well as people entering and exiting the office area produced several distractions. However, the students maintained their focus and attention on the individual presenters. Throughout the assembly, students displayed attentive and supportive mannerisms by clapping, smiling, listening, and focusing on the student who was sharing his or her selection.

Before each presentation, students in the audience were instructed to listen for the different types of leads that would be read. After each presentation, the homeroom teacher focused on the strengths of the writing piece. The structure of the paper, development and use of leads, and supporting details were emphasized. Each teacher was quick to point out to the participants the effective writing strategies that the particular piece contained. Teachers summarized the use of leads and the positive impact that they had on the overall success of the piece. The teachers

were very specific when they summarized each paper, highlighting the specific component that the students had been focusing on during the month.

The February "Writing Celebration" was also held at "Noble's Courtyard"; however, the goldfish fountain was unplugged and a microphone was used to amplify the students' voices. The focus of this month's celebration was slightly different than that of previous months. For the first time, teachers used students' reading response journals as the basis for their selection. With the overall emphasis on improvement of writing in narration and persuasion, teachers had begun to focus their efforts in writing that was associated with "reading" in addition to the writing that occurred in "Writer's Workshop." The teachers felt that the students were not working up to their potential with their responses in their reading response journals. Therefore, teachers wanted to promote higher quality of writing and responding in this area.

During the February assembly, the students exhibited their understanding of their required components both as presenters and participants. Since the reading response letters were quite lengthy, only two students were selected to present from each class for this particular assembly. Empowerment of the students to make decisions, give feedback, and assess each presenter's work was noted

throughout the assembly. For the first time, students were
encouraged to share aloud the components of each piece and
to assess its strengths. Students who served as the
audience were encouraged by one teacher who served as the
assembly coordinator to "do what the four of us teachers do
when we read your writing and assess the quality." Students
were instructed to personally assess each piece according to
the following criteria:

- Appropriateness of writing to the reading assignment
- Support for personal response is provided using the
  author's tone and style
- Evidence of higher order thinking is provided

After each presenter was finished reading aloud his
piece, students had the opportunity to assess the work by
stating evidence supporting the criteria. Both the
presenter, through his response in the journal, and the
audience, through verbal feedback, were provided with the
same type of opportunities that promoted decision-making.
Teachers were transferring strategies that they use during
their monthly portfolio analysis to their students.
Students were encouraged to mentally and verbally assess
each presentation and to evaluate the student's overall
progress with respect to the established criteria or
benchmarks. Analysis of each presentation focused on
qualitative elements that were related to the benchmarks.

Comments from students such as "The letter focused on the need to improve the author's tone;" "The use of descriptive words really made it very clear to me;" and "The comparison that Michael did with the ring to represent temptation in the world made the author's point very clear." The presenters also shared their insights through comments such as "The author did a poor job describing the chapter dealing with isolation," "After studying leads, I believe that the author could improve his lead related to the Secret Garden. At times, I didn't want to read on - there were parts that just weren't exciting, no interesting leads;" "I don't know of any other author who has used this style - I'd recognize it anywhere now;" and "personally this is a great style of writing, I'm going to try it in my own writing - it's very suspenseful."

The students were continually able to share their perceptions and rationale for assessing the reading response entry. As one teacher stated during the assembly,

"We really want you to be able to state your opinions, thoughts, and explain why you think in a certain way. Your comments today will indicate how you are thinking and how you would judge or score each paper. This is the same process that we use when we score your papers. We really want you to start assuming that ability - to be able to internalize how improve your own writing and

what components are evident in the piece to support it. We want you to be able to measure you own progress and know when and how it's improving."

Throughout the assembly, students were eager to share their thoughts and rationale. Teachers were able to select only a couple of responses for each presentation due to time limitations. However, after the program, the teachers acknowledged their support for having the students actively involved. As one of the teachers stated in a follow-up interview:

"We are starting to see into their minds. They respond to each of us in their journals, but this gave us the chance to see if they really are aware of what we are teaching them. Can you believe it? Did you hear their responses? They are getting so much better. Their writing and thinking is really getting so much deeper, so much better. When I was growing up we didn't have time to think. We would read a story and answer ten questions. Then we'd read another story and answer ten more questions. We never got to think or write about what we thought. We are now able to change and have the kids actually respond in writing. Everyone in my class is getting better, they all have improved."

Creation of Vocabulary Program

During the December meeting, teachers and students

spent time discussing current television programs as part of their current events focus. Students discussed types of television shows (comedy, news-related, documentary, cartoon, serial, biographical etc.) and their impact on society. All students had access to television daily and often reported watching upward of three or more hours of programming each day. Since television viewing was a natural part of each student's daily life, the team of teachers selected to use the idea of television viewing as the basis for their focused writing prompt. As a team, the teachers developed the following uniform writing prompt that was used during class writing time:

> "Your parents are thinking about restricting your television viewing. Write a letter to your parents persuading them to allow you to make your own television viewing decisions."

Students were provided with time to complete their first draft, revisions, editing, and preparation of their final piece.

During the monthly portfolio analysis session which focused on this persuasive prompt, the teachers assessed and discussed the student entries. Comments such as, "there is no voice to this paper," "I haven't seen a paper yet that has a developed style," and "most of these papers have very basic vocabulary and sentence structure" were repeated time

and time again by the team of teachers.

During the conversation, one of the teachers spoke up and shared her hypothesis related to the limited color or vocabulary evident in the student writing. This team member stated the following:

"As you all know I have been teaching for a long time and I have noticed a difference with students' writing and selections of words. In past years, when we used basals and language books heavily, we had a vocabulary section that was automatically built into the program. But you know, with our Reader's and Writer's Workshop and the utilization of novels, there is no built in vocabulary development for the kids. I know I'm guilty of not stressing it as much as I did when we used the old system. Maybe that's the problem. Maybe we should be teaching vocabulary in some type of systematic way."

Another experienced teacher spoke up and added the following:

"You're right, we used to have vocabulary building as a ongoing part to our reading and writing. I can't say that I miss the old approach or want to go back to that method, but there's no reason that we can't come up with our own vocabulary program for the kids."

Agreement from the other two teachers followed who acknowledged that they had never been a part of the "old

system" and didn't like the sound it.

Collaborative planning for the creation of a vocabulary program followed the discussion. All four of the teachers focused on the instructional task (Shavelson & Stern, 1981) as their top priority for their planning process. The preactive planning and decision-making by the teachers resulted in a new instructional adaptation with the formation of the vocabulary program. At this point in their decision-making process, the teachers did not elaborate on the "fine" points of program; instead, they developed an overall guiding "script" which served as the basis for their program. The "script" or holistic plan provided the teachers with the framework for their program. The planning process could be described at two stages: the decision-making stage where the creation of the vocabulary program emerged through the assessment of student writing samples and the preactive planning stage where the teachers developed the overall program and its components.

After much discussion, the teachers collaboratively developed a vocabulary program that would be incorporated into their language arts program immediately. The program was built upon the premise that students needed to expand their knowledge base related to vocabulary words. The teachers also felt strongly that the program should offer an individualized component since both Writer's Workshop and

portfolio assessment utilized that approach. Additionally, the teachers commented that even though they taught a class of fifth graders, they "taught individual children." The team's philosophy related to meeting individual student needs served as a foundation for the program.

As a result of their preactive planning, the teachers developed a weekly vocabulary program whereby each student was responsible for selecting five new words that each student encountered in print during the week. The words could be selected from reading, science, social studies, current events, math, or free-reading time materials. Each student selected five words that were new to himself. Since different students were functioning at various academic levels (second semester first grade level to eighth grade abilities), this format would allow students to select words that were meaningful and appropriate based upon their individual abilities. With the overall task defined, teachers then concentrated on other elements related to instructional planning. The logistics of how the program would operate was then decided. It was at this point in the decision-making progress that individual styles began to surface. One of the teachers decided to have her students compile their words on a "word ring" which would continue to grow weekly. These words would remain in the possession of the students but the teacher would "check" the ring weekly.

The other three teachers selected to have their students writes their five words in vocabulary notebooks. However, each teacher had different types of notebooks and different requirements once the words were recorded. Activities varied among these three classrooms. In two classrooms, students selected their words, recorded them in their notebooks, and created original sentences using them. In the other classroom, students selected their words, and completed various language associated assignments with them (creating antonyms, synonyms, and other language tasks based upon the words selected). Even though each teacher approached the day-to-day implementation slightly differently, each teacher contributed to the overall development of the program (see Appendix G).

After a couple of months of implementing the newly developed program, the team of teachers met to discuss the effects of their efforts. One teacher immediately raised a concern by stating "we need to stretch the students more, we need an additional piece where we emphasize some of the strategies that we've been using." As this teacher was stating her concern, another teacher became anxious to speak. Quickly, this teacher added, "I had similar feelings a few weeks ago; so I started a prediction component to my program." All of these teachers had been implementing prediction, estimation, visualization, and manipulation as

strategy-based instructional techniques for the last few
years. These instructional strategies had been modeled for
staff and follow-up training had occurred on numerous
occasions. This particular teacher went on to say,

> "We emphasize prediction in just about every other
> subject that we teach, why not with our vocabulary
> program? I've started small, I give the kids extra
> credit if they predict the meaning of their words using
> context clues. Then, they need to look up each meaning
> in a dictionary, verify their prediction, and
> accurately write down the meaning. So far, I've only
> had a couple of students who were interested in the
> extra credit points."

The same teacher was eager to point out its merits with
respect to reading instruction by stating:

> "Even in Reading Workshop when the students may be
> working in discussion groups there is some carry-over.
> Often, a group of students will be reading together,
> usually the discussion group has a couple of poor
> readers, and they may choose to read aloud together.
> While they are reading, they discuss the meaning of
> various words. When they see a word that no one seems
> to know, they follow the usual prediction strategies,
> and then add it to their lists. So, I am seeing them
> start to use this approach in other areas. Overall,

the kids seem to be much more aware of vocabulary.
They are really noticing all kinds of words."

The other teachers listened to her comments and
confirmed her efforts. Even though none of the three
decided to add the same form of prediction activities, they
supported her efforts and stated their desire to "wait
awhile" before adding anything else.

As the meeting was drawing to a close, one teacher
remarked,

> "I'm not sure, but I think I'm starting to sense a
> 'why' or a 'so what now' with some of my kids. They
> aren't resisting or not wanting to do the vocabulary
> words, but I feel that I haven't effectively addressed
> the 'why.' Yes, they know it's helpful to be more
> aware of words, to have a larger vocabulary, and to
> select words that really convey your thoughts; yet, I'm
> not sure that's enough to keep them hooked. You know,
> this is the first time in years that I've had
> structured, formal dictionary instruction. It's
> probably something I need to work out, at least for
> next year."

Another teacher responded to this teacher's concern by
remarking,

> "I sort of answered a 'why' that I had earlier this
> month by developing a jeopardy game. Plus, I always

like to have a little fun with the kids and this seemed
to do both. I had planned on developing the class
posters or charts that would highlight the students'
vocabulary choices, but I never got to that. I still
think it is really a great idea, but it just didn't
happen this year. I think those ten snow days and all
of the other late openings really caused problems with
my initial planning. Anyway, I revised my idea to
include a jeopardy game. I knew I wanted to have some
way of pulling the vocabulary words together for all of
the students so I made a 'Jeopardy' board and we have a
class competition each month. The kids love it, plus,
they learn other classmates' words so they will be able
to get more team points. They love it. I'll probably
keep using it for this year."

One of the other teachers who hadn't spoken about the
vocabulary program remarked, "We are on the right track. We
saw the need to increase the kids' vocabulary and we are
doing that. Remember we're just starting with some of this.
We can always make changes for next year."

With that final comment, the team acknowledged their
progress thus far and chose to wait until a later in the
spring or summer to make changes to their vocabulary
program. The teachers, through collaborative decision-
making, selected to continue implementing their vocabulary

program but to record ideas and suggestions that they may have which could be shared and discussed when the teachers begin their planning for the 1994/95 school year.

Curricular Integration

Having the inductively derived benchmarks for writing provided a clear focus for both teachers and students. The teachers were able to utilize preactive planning strategies to develop lessons and unit topics specifically designed to meet individual student needs. As the team continued to implement their lessons and discuss their students' progress during monthly meetings, another curricular adaptation surfaced. During the February team meeting, one teacher announced: "I'm very pleased with the progress that we're making with our students in writing. But, we've been concentrating on it basically only during Writer's Workshop and I think we need to extend it to the writing that the kids do in their reading response logs." The other team members acknowledged their support for the idea and decided to develop benchmarks and rubrics specifically for the reading response journals.

Using the previously established writing benchmarks as a focal point for instruction and expectations, teachers created reading response benchmarks and rubrics. Parallelling the format already established, the teachers reviewed student reading response journals, analyzed

strengths and needs, and collectively created benchmarks for
this curricular area. The team of teachers modeled their
decision-making format by sequentially addressing the
generalized steps of the problem-solving process. The
problem or need to have students "write well" when
responding in other content areas (specifically reading) was
identified by one teacher. The three other teachers
confirmed the same need, acknowledged the problem, and began
to brainstorm possibilities. Over several days, the
teachers informally met during lunch, recess, and after
school and discussed possibilities for addressing this
particular need. Through collaborative teamwork, the
teachers resolved their problem by developing grade level
benchmarks and rubrics for future reading response journal
entries. The agreed upon benchmarks emphasized:

- Format

- Appropriate Response

- Evidence of Higher Level Thinking

The dimensions for the category of "Format" were represented
on a four point scale while the remaining two categories,
"Appropriate Response and Evidence of Higher Level Thinking"
were assessed using a three point scale. The teachers
communicated these standards with their students. All
students were provided with a copy of the benchmarks and
rubrics to glue inside their reading response journals.

During follow-up classroom observations, students were observed using their own copies of the benchmarks to evaluate their own progress. After students had read from their selected novels, they responded to their homeroom teacher by describing their thoughts, opinions, predictions, and perceptions related to the book. With each student selecting a different novel to read during Reader's Workshop, the teachers wanted to ensure that each student was comprehending the true meaning of the book. Therefore, each student responded in writing to the teacher by describing the author's tone, purpose, and point of view. Often, students referred to the benchmarks to verify the expectations for their reading responses. Parents were also provided with the same information through a parent newsletter. Since reading response entries were often assigned as homework in all of the classes, the teachers wanted to communicate their expectations with the parents as well as with the students.

As the weeks and months unfolded during the remainder of the year, the students continued to utilize the benchmarks and rubrics for their reading response journals. Having their assessment criteria available to them enabled the students to verify the expectations for the assignment and, more importantly, begin to internalize the elements of self-assessment and reflection. In addition to supporting

their opinions related to events in the book, students were also beginning to evaluate their own growth. By mid-spring, one teacher summarized the growth in her students by stating: "Everyone in my class has improved in their reading responses. My class as a whole has improved by about 70%. They are getting so much deeper in their thinking. They have been able to move away from simply retelling the story to explaining why the author has written events the way that he has or how the book relates to another book or incident in their own lives." As another teacher stated in April, "When students know what is expected of them, they have the power to make it happen. They have control over the outcome. They can develop their responses, review them, and realize what is expected of them. It really gives them ownership in the whole learning process."

The benchmarks, rubrics, and standard prompts continued to provide a focus for the teachers during the spring. By April, the teachers had modified the original portfolio format (standard prompts and student selected pieces) into the area of science.

Writing in content areas was a concept that was difficult for the students. They often did not organize their data, support their ideas, or provide justification for their responses. Specifically, improving persuasive

writing related to the science curriculum was viewed as a goal for this group of students. Integrating their previous knowledge of developing benchmarks and creating standard writing prompts, the teachers decided to adapt their instructional strategies into the area of science.

Within a few days, the teachers had infused their MSPAP preparation with portfolio analysis. Up to this point in the year, teachers had relied on MSPAP prototypes as an instructional tool to use in preparing students for the state testing in May. These prototypes contained group investigations, sample activities, and recommended follow-up ideas. However, after expanding the concept of benchmarks and rubrics into reading response journals, the teachers felt very comfortable with the concept of developing writing prompts and rubrics related to science goals. As a result, the teachers integrated their MSPAP preparation with persuasive writing techniques related to scientific information. The teachers worked together to design hands-on investigations related to measuring changes in body temperature. These investigations were designed to promote small group interaction and discussion. They also included a component related to individual accountability where students demonstrated their understanding of the particular concept without support from their peers. In this case, the teachers created a persuasive writing prompt that encouraged

students to utilize the information from their small group investigation in order to respond to the prompt. After collaborating on the format, the teachers developed the following:

"Pretend you are a writer for 3-2-1- CONTACT Magazine. You have been asked to write an article about the effects of exercise on body temperature. Be sure your article uses information from the investigation you did to support your statements. Your article should include a title and an illustration with a caption. Because all of the magazine readers will see your article, you need to be sure all words are spelled correctly and correct punctuation is used."

The teachers reviewed the purpose of scoring rubrics and had the students participate in developing the rubrics for their science writing. By actively contributing to the creation the assessment criteria, students were able to internalize the expectations for their writing and monitor their own progress and success. Students also viewed their ownership in this process as significant to their overall success and desire to achieve. During a classroom observation, a student had the following comments to share:

"The rubrics really help me because I know what counts in my writing. We (the students) were able to help Mrs. D. come up the guidelines. It helps me know what

to include."

Another student conveyed her feelings in the following
manner:

> "This is kind of like our reading benchmarks and
> rubrics that we created earlier. I really like it.
> It really helps me know the expectations. I can also
> use it to make sure that I have included all of the
> necessary parts before I turn my writing in."

Student Empowerment

As the year progressed, teachers continued to make more
and more decisions related to instructional practices for
students. In addition to regular monthly portfolio
meetings, teachers also met to plan lessons and to follow-up
ideas presented at the monthly meetings. By March, teachers
were integrating decisions made related to portfolio
assessment into other curricular areas. Rubrics for reading
responses had been developed, preliminary vocabulary
extensions for reading discussion groups had been formed,
and homework assignments were reflecting student needs that
had been identified through the ongoing assessment of
students' writing portfolios.

In addition, by late winter, teachers were transferring
many of their decision-making strategies to their students.
As the months went on, students were provided with numerous
experiences and opportunities to promote their own

empowerment in the learning process. Deliberate, well-planned lessons provided students with concrete experiences in developing preactive decision-making skills and assessing individualized growth. Teachers were adapting the decision-making processes that they were using for their students. Classroom observations indicated a focus on internalizing preactive planning, monitoring self-growth, and assessing one's progress. Specifically, teachers imparted these strategies to students through their Writer's Workshop lessons. Students were encouraged to become a larger share-holder in their own learning. In a modified "flow-down process," teachers imparted the decision-making process that they had participated in to their students. This process for student empowerment shadowed the process that teachers had undertaken during their own decision-making sessions. Classroom observation and analysis of student work samples indicated that student empowerment could be divided into the following categories:

- Preplanning/preactive decision-making strategies
- Instructional adaptations
- Self-evaluation techniques

The transfer of preactive decision-making strategies from the teachers to the students was visible throughout the second semester. As the teachers together planned and developed new or adapted instructional techniques based upon

their analysis of individual writing portfolios, these techniques were then implemented for the students. However, during the instructional implementation, the students were provided with strategies that encouraged them to become active participants in the preplanning stages. Preactive decision-making skills were emphasized through Writer's Workshop with the intent of having students assimilate and internalize these processes.

Specifically, during the month of February, students were instructed on the use of graphic organizers as preplanning organizers for their writing. Through modeling, teachers demonstrated the importance and benefits of preplanning before task completion. Students were provided with examples of how to utilize graphic organizers as one of their major pre-writing strategies. These techniques were modeled by each classroom teacher using overhead transparencies and large classroom charts. Each teacher emphasized the importance of using concrete preplanning organizers by demonstrating how to incorporate them into the planning process. The teachers incorporated a "think aloud" format for the students in order to provide them with a tool or technique that would serve as the "script" for their actual writing. Graphic organizers served as a guide for the students and provided a concrete opportunity for students to begin their own "preactive planning."

Formulating ideas, organizing thoughts, and assembling
information were promoted with main idea tables, venn
diagrams, and point/counterpoint organizers.

Document analysis of students' preplanning organizers
demonstrated their ability to internalize the preactive
decision-making skills that they were being given. In each
classroom, students had developed persuasive leads using
graphic organizers. For example, a female student in one of
the classes developed a "persuasive table" which consisted
of her position as the table top and supportive arguments as
the legs for the table.

THE NEED FOR BETTER COMPUTER SOFTWARE			
MORE OPPORTUNITIES FOR PARTNERSHIP Students would have more opportunities to work in pairs to solve problems and share their ideas on how to answer the computer questions and puzzles.	MORE ADVENTUROUS AND INFORMATIVE INFORMATION Students need to be exposed to more computer software that is exciting, adventurous, and informative. Much of our software is getting old, and it needs to be replaced with new and interesting pieces.	MORE CHALLENGING SOFTWARE IS NEEDED Kids really like challenges, especially against the computer. It makes kids think more and better.	MANY STUDENTS THINK THAT OUR CURRENT GAMES ARE CHILDISH Some of the software games that we have are really easy for us and could be used with younger students. We need to have software that suits us and our abilities.

From this graphic organizer, the student was able to
prioritize her arguments, develop counterarguments, and
begin her first draft.   This symbolic representation
provided both a visual and intuitive reminder for the
paper's organization and contents. Utilizing the preactive
planning opportunities of graphic organizers was also
evidenced by the following example from a male student.
This student created an argument/counterargument preplanning
organizer to coordinate his thoughts and assist with the
preparation of the major points for the paper. Even though
the student did not completely internalize the concept of
arguments and counterarguments, he was able to utilize a
graphic organizer to assist him with planning the major
points for his paper. This graphic organizer emphasized his
individual decision-making processes and resulted in the
following:

ARGUMENT	COUNTERARGUMENT
We need to fix up and add to the playground.	The equipment is getting old and worn out.
We need new soccer goalposts.	Goalposts are missing.
Basketball hoops need nets.	Even though they have been stolen before, we new basketball nets; and we need to try to take care of them.
Buy some new games for different ages of kids.	New games will keep kids out of trouble at recess.

During individual interviews with the teachers, the following rationale for using graphic organizers was provided:

"Graphic organizers enable kids to get the main idea down and to plan what support they can give for that idea. It also assists the students with organizing their thoughts and points. It provides them with a visual representation of the ideas that they have in their minds."

Another teacher added the following comment about graphic organizers:

"It helps them to internalize the planning process for making decisions about almost anything: comparing two countries, persuading a reader, supporting a main idea, just about anything. When kids use a cognitive map, they become more aware and conscious of the process they use to reach their decisions. It really helps them to become more independent and responsible thinkers."

Throughout the second semester, teachers also emphasized self-evaluation techniques with their students. The inductively derived portfolio benchmarks served twofold: (1) to provide a monthly focus for portfolio analysis and, (2) to serve as a model for developing rubrics for other instructional areas. Teachers internalized the portfolio

benchmarks and began to transfer the concept of benchmarks and corresponding rubrics to other areas. They also developed rubrics for student use as a tool which promoted self-assessment and evaluation.

Rubrics related to the reading response journals provided students with an opportunity to demonstrate their knowledge and understanding of journal expectations and requirements. The benchmarks and rubrics enabled students to apply both quantitative and qualitative evaluative responses to their own work. Students were given the opportunity to apply the rubrics to their own journal entries and to justify their responses.

By March, students had experienced numerous occasions where they could assess their own progress and monitor their growth with respect to the pre-established journal benchmarks. Near the end of the third marking period of school, the teachers expanded the students' experiences by having them respond in their journals to the following mini-prompt:

"The response dated _____ shows my best work."
I have chosen it because . . ."
"These are my personal goals for the fourth grading period . . ."

Students were encouraged to assess their own journal entries with respect to the benchmarks and to determine

their area for improvement. As one teacher stated during a classroom observation, "Set your personal goals for things that you want to do or haven't done yet. Please remember the criteria, look at your writing carefully and give me some specifics that pertain solely to you. Select your goals carefully; that is, how you will measure your own individual progress."

Students demonstrated their ability to evaluate their own progress by responding to the prompt, selecting personal goals, and supporting their decisions by sharing their thought processes. One student provided the following response:

> "I chose my journal entry of December 4 because I used higher level thinking. I put in my opinions and I recommended this book. I'd like to continue using more of my opinions and be able to support them from the text."

Another fifth grade student responded in the following manner:

> "I chose my journal entry of December 13 because it shows my best work. I really did a lot of supporting my ideas and quoted a lot from the book. My goal for the next marking period is to use higher order thinking and to give even more supporting details."

A third fifth grade student shared his thoughts for making his decision in the following response:

"I chose this January response because I am proud of how it turned out. I have included all of the necessary parts. But, I think that I could still improve by going through the writing process more carefully. It's not that I don't do any of the steps, or anything, but I need to spend more time on each step of my writing. It doesn't matter why I am writing, I still need to take each step carefully. That's what I am going to do, make sure I go through each step carefully."

A similar comment was provided by the following student:

"I have selected my beginning January response because it has all of the writing components. I also think that it is one of my very best writings. I have improved in my writing by being able to write longer stories that really analyze and support my ideas. My goal for the next marking period is to add more thinking to my writing."

In addition to applying teacher-generated rubrics, students were also provided with opportunities to develop benchmarks and corresponding rubrics. In late March, the students were encouraged to synthesize their background

knowledge and to develop class benchmarks and rubrics for their own writing. For the first time, students were invited to contribute to the development of grade-level standards. In order to demonstrate their understanding of portfolio benchmarks and rubrics, students were given decision-making abilities to create their own benchmarks. Up to this point, students interacted with their reading and writing using benchmarks that had been established by the teachers. This experience of allotting decision-making abilities to the students encouraged them to assimilate their knowledge and background experiences into a cohesive, meaningful instructional task. With this major undertaking, students were provided with the opportunity to integrate decision-making processes with instructional adaptations. Specifically, the fifth grade students created the assessment techniques to measure their own academic gains. They also provided specific feedback for their peers related to instructional needs and strengths. This integration of instruction and assessment occurred as a natural outgrowth of the teachers' experiences with portfolio assessment. As one teacher stated during an interview,

> "The idea of having kids assume responsibility for
> creating, implementing, and assessing benchmarks and
> rubrics came directly from our monthly portfolio
> assessment meetings. We all tended to want to have

our kids involved as much as possible. We have been able to make so many good decisions about instruction this year, we basically wanted to kids to have that same opportunity."

Another teacher who was interviewed on that same particular day provided the following rationale for the decision to have the students develop their own rubrics:

"Having the kids try to create benchmarks and rubrics just seemed like the next step. They have grown and stretched themselves so far this year. I never would have guessed that they could do what they've done. We need to not sell them short. Why not let them try something at even a higher level? As long as the kids can experience what you're talking about, they have a much better chance of succeeding. Having kids create rubrics has allowed them to experience what we experience and what the state will expect of them in May on the MSPAP."

By unanimous agreement, the four teachers enthusiastically approached the task of having students develop scoring rubrics. The teachers discussed possible formats, each teacher having her own ideas for implementation. During the week that followed, classroom observations yielded specific information as to the method of dissemination. Three of the teachers reviewed the

criteria from the standard prompt that was required in the students' most recent persuasive writing piece. These criteria were shared orally by both teacher and students in an informal discussion. Each of these teachers proceeded then to share sample rubrics from the Maryland State Performance Assessment Program (MSPAP) by displaying transparencies containing examples of expected criteria for the state-generated writing prompts. These rubrics also followed a four-point format, similar to the format that the teachers were using in their monthly portfolio assessment sessions. In these particular classes, students discussed the criteria and expectations with respect to the state rubrics. In two of the three classes, teachers used writing assessment samples from MSPAP as their class example. In the third class, the teacher selected to use a math problem-solving example as her model for discussion. In each classroom, the teacher focused the discussion on the criteria needed to earn a specific point. Examples were given for each category and suggestions for improvement were shared by each teacher.

The fourth teacher on this team introduced the benchmarks and rubrics in a slightly different format. She did not rely on any MSPAP format or examples; instead, she focused on the students' current writing pieces. In this classroom, a discussion was held emphasizing the components

that students were using in their most recent writing sample. Students brainstormed techniques, styles, and writing elements that they were attempting to incorporate into their own pieces.

After the concept of rubrics had been introduced by each teacher through a self-selected format, the teachers then provided time for the students to create their own rubrics for their persuasive writing samples. Each teacher grouped the students in cooperative learning groups of four to six students. Each group represented a heterogenous grouping of students based upon gender, ethnicity, and ability. The instructions for the students remained similar from classroom to classroom. For example, in one class, the students were told: "You as going to develop rubrics for your persuasive writing pieces. You know the difference between the art of written persuasion and the art of oral persuasion. You are going to develop rubrics in your discussion groups for scoring written persuasion pieces. As a group, decide what a piece needs to get a 4, 3, 2, and 1. When you are finished, we'll come together and combine them as a class." The following similar directions were shared by another teacher, "You have a lot in your head about what makes a writing piece good. Think about what makes a persuasive piece good. You have the ability to do that. You can work in your groups and brainstorm what makes a

paper a 4, 3, 2, or 1. Remember when you brainstorm, you
put down everyone's ideas. We'll share your group ideas and
then develop our class rubric from those ideas."

The students in each of the classrooms spent the next
two days developing rubrics. Each class approached the task
in the same format: students first brainstormed criteria
that would be necessary for a paper to earn a 4. These
ideas were shared with the total class and a composite list
was created. Students justified their contributions and
explained their thought processes as ideas were shared with
the class. Comments such as the following were heard in
each of the classrooms as the researcher observed the
process: "In a 4 paper there really needs to be a strong
argument where the writer sticks to the point and has a lot
of backup information for the argument;" "I really think
that the persuasive paper needs to have a solid ending, you
know, with closure that summarizes the position;" and "The
opening of the letter should really be strong and have the
position stated so the reader knows what the letter is
about."

After much discussion, each class developed their own
performance standards and corresponding rubrics. The
standards described the components that needed to be evident
in the writing sample. Classes used the same format in
developing standards for persuasive papers that would be

assessed with a 3, 2, or 1. However, as the students

discussed criteria that would be needed for a paper to earn

a "3" or a "2", they realized the need to be very specific.

In all cases, the students returned to their "4" rubric and

added additional information. Instead of including

"arguments" and "counterarguments," the students specified

the number of each that needed to be included. After

revising their "4" rubric, the students then relied upon

that benchmark to guide them in determining the criteria for

the other rubrics. Whenever possible, students explicitly

stated a quantifiable figure for the various components. As

one student stated during a classroom observation, "This is

much harder coming up with things for 3 and 2 papers without

having numbers for our 4 rubric. I'm glad we added them to

the 4 rubric."

Each class compiled their rubrics and a chart for each

student to use (see Figures 4.1-4.4). Even though specific

criteria were developed according to each rubric, the paper

would earn one "overall" score that would be reflective of

all of the stated criteria. The overall score that a paper

would receive paralleled the holistic scoring that the

teachers used during their monthly portfolio assessment

meetings. This same type of scoring rubric would also be

used during the MSPAP test in May.

Document analysis of the various classroom rubrics

indicated very similar criteria had been established by each class of students. All four classrooms developed rubrics that specified in numerical form the requirements related to stating the persuasive argument and counterargument. The number of required arguments remained the same in each class, with 3 representing the minimum number. However, there was a slight variation in the number of expected counterarguments, ranging from 2 counterarguments in three classrooms to 3 counterarguments in the fourth classroom. Each of the classes also demonstrated similarities in their approach to editing by specifying a range of errors. Punctuation, spelling, and grammatical errors were quantified according to each scaled point. The remainder of criteria for each category was not defined in terms of quantifiable measures. Instead, indicators such as "most," "some," "usually," and "little" were used. When asked why some indicators were given a numerical format, one student replied, "It's really hard without them, we need to know what each of us expects when we read each other's paper." Another student shared the following comment: "It really helps me focus, I know just what to look for when I am the assessor. The numbers for the arguments/counterarguments and editing errors make scoring very clear."

After the rubrics had been distributed to the students, each teacher retained the same cooperative groups and

4	3
ASSIGNMENT REQUIREMENTS 3 leads/2 endings letter format (greeting, body, and closing) turned in on time **FOLLOWS WRITING PROCESS** evidence of brainstorming (graphic organizer), rough draft, conferences, editing and final copy **STICKS TO TOPIC/EASILY UNDERSTOOD** **EDITS FOR PUNCTUATION, SPELLING AND GRAMMAR (at most, two mistakes)** **ARGUMENT IS SUPPORTED WITH EXAMPLES, AND COUNTER ARGUMENTS FOR EACH POINT ARE INCLUDED** **WRITES IN PARAGRAPHS**	**ASSIGNMENT REQUIREMENTS** 3 leads/2 endings letter format (greeting, body, and closing) turned in on time **FOLLOWS WRITING PROCESS** evidence of brainstorming (graphic organizer), rough draft, conferences, editing and final copy **STICKS TO TOPIC/EASILY UNDERSTOOD** **EDITS FOR PUNCTUATION, SPELLING AND GRAMMAR (at most, four mistakes)** **ARGUMENT IS SUPPORTED WITH EXAMPLES, AND COUNTER ARGUMENTS FOR MOST POINTS ARE INCLUDED** **WRITES IN PARAGRAPHS**
2	1
ASSIGNMENT REQUIREMENTS 2 leads/no clear ending letter format attempted- some parts may be missing (greeting, body, and closing) turned in on time or 1 day late **FOLLOWS WRITING PROCESS BUT MAY HAVE SOME MISSING STEPS -COULD BE UNCLEAR** evidence of brainstorming (graphic organizer), rough draft, conferences, editing and final copy **SOME PARTS ARE CONFUSING** **EDITS FOR PUNCTUATION, SPELLING AND GRAMMAR (at most, six mistakes)** **ARGUMENT HAS SOME SUPPORT AND ONE OR NO COUNTER ARGUMENT IS INCLUDED** **WRITES IN PARAGRAPHS, COULD BE POOR**	**ASSIGNMENT REQUIREMENTS** 1 lead/no clear ending little evidence of letter format turned in late **STEPS OF WRITING PROCESS ARE INCOMPLETE** very little evidence of brainstorming (graphic organizer), rough draft, conferences, editing and final copy **MANY PARTS ARE CONFUSING** **VERY LITTLE EVIDENCE OF EDITING (more than six mistakes)** **ARGUMENT HAS NO SUPPORT AND ONE OR NO COUNTER ARGUMENT IS INCLUDED** **MAY HAVE MISUNDERSTOOD THE ASSIGNMENT**

Figure 4.1 (Persuasive Rubric 1)

4	3

3 ARGUMENTS
2 COUNTER ARGUMENTS
2 SOLUTIONS
LETTER FORMAT-ALL CORRECT
  Paragraphs
  Date
  Greeting
  Closing
GOOD LEAD
POSITION STATEMENT
REALISTIC
GOOD ENDING STATEMENT
SUPPORT FOR ALL STATEMENTS
LEGIBLE (readable)
NO MORE THAN 3 SPELLING OR
  PUNCTUATION ERRORS
	2 ARGUMENTS
	2 COUNTER ARGUMENTS
	1 SOLUTION
	LETTER FORMAT
	  Not all paragraphs
	  Greeting
	  Closing
	LEAD
	POSITION STATEMENT
	MOST STATEMENTS SUPPORTED
	LEGIBLE
	REALISTIC
	NO MORE THAN 4 OR 5 SPELLING AND
	  PUNCTUATION ERRORS

2	**1**

1 ARGUMENT
1 COUNTER ARGUMENT
0 SOLUTION
LETTER FORMAT
  Greeting
  Closing
NO POSITION STATEMENT
REALISTIC
POOR OR NO LEAD
NO SUPPORT STATEMENTS
FAIRLY LEGIBLE
6 TO 8 SPELLING OR PUNCTUATION
  ERRORS
	1 ARGUMENT
	NO COUNTER ARGUMENT
	LETTER FORMAT
	  No greeting or closing
	9 OR MORE SPELLING OR PUNCTUATION
	  ERRORS
	UNREALISTIC
	NO POSITION STATEMENT
	NO LEAD

Figure 4.2 (Persuasive Rubric 2)

4	3

CORRECT LETTER FORMAT USED-NO ERRORS
CORRECT PARAGRAPHING IS USED-NO
  OVERUSE OR UNDER USE
ALL REQUIREMENTS OF ASSIGNMENT
  SUBMITTED SHOWING EVIDENCE OF
  SELF-REVISION
    Idea sheet
    Graphic organizer
    Drafts
    3 leads/endings
    Conference sheets
    Final copy
VERY CLEAR STATEMENT OF POSITION,
  SUPPORTED WITH DETAILED ARGUMENTS
  COUNTER ARGUMENTS-NO ORAL
  PERSUASION
EFFECTIVE LEAD WHICH DRAWS THE
  READER IN AND EFFECTIVE ENDING
  ARE USED
PIECE SHOWS CONSIDERATION OF
  AUDIENCE
ONE PUNCTUATION, SPELLING OR
  GRAMMAR ERROR
	CORRECT LETTER FORMAT USED-NO
	  ERRORS
	CORRECT PARAGRAPHING
	MOST REQUIREMENTS-SUBMITTED-
	  FEWER ENDINGS/LEADS
	CLEAR STATEMENTS OF POSITION-NO
	  ORAL PERSUASION USED. ARGUMENTS
	  AND COUNTER ARGUMENTS USED AND
	  SUPPORTED
	CLEAR BUT PERHAPS WEAKER LEADS AND
	  ENDINGS ALLOWED
	CONSIDERATION OF AUDIENCE
	2-3 PUNCTUATION, SPELLING AND
	  GRAMMAR ERRORS

2	**1**

LETTER FORMAT-ONE MISSING PART
ONE PARAGRAPHING ERROR THAT MAKES
  PIECE LESS CLEAR
MOST REQUIREMENTS
  1-2 endings/leads
  Less evidence of revision
PIECE SHOWS CONSIDERATION OF
  AUDIENCE
SOME CONFUSION BECAUSE OF GRAMMAR,
  PUNCTUATION, AND SPELLING ERRORS
POSITION STATED BUT NOT CLEAR OR
  VERY WELL SUPPORTED
1 ARGUMENT
1 COUNTER ARGUMENT
0 SOLUTION
LETTER FORMAT
  Greeting
  Closing
NO POSITION STATEMENT
REALISTIC
POOR OR NO LEAD
NO SUPPORT STATEMENTS
FAIRLY LEGIBLE
6 TO 8 SPELLING OR PUNCTUATION
  ERRORS
	LETTER FORMAT-2 TO 3 MISTAKES
	CONFUSING PARAGRAPHING-NOT CLEAR
	  WHERE ON ENDS AND ANOTHER BEGINS
	  AND PARAGRAPHS DON'T STICK
	  TOGETHER
	POSITION STATED BUT CONFUSING
	  Few arguments or counter
	    arguments
	  Very little detail to support
	    arguments
	WEAK LEAD AND NO CLEAR ENDING
	LITTLE CONSIDERATION OF AUDIENCE
	SIGNIFICANT SPELLING, GRAMMAR, AND
	  PUNCTUATION ERRORS THAT GET IN
	  THE WAY OF UNDERSTANDING

Figure 4.3 (Persuasive Rubric 3)

4	3

ASSIGNMENT REQUIREMENTS
USED ARGUMENTS FOR (3) AND AGAINST
  (2)
EXAMPLES, DETAILS FOR SUPPORT
CORRECT LETTER FORMAT
EFFECTIVE LEADS
EFFECTIVE ENDINGS
RECOGNIZE TONE, AUDIENCE
EFFECTIVE WORD CHOICE (USAGE)
MECHANICS
  Used paragraphs
  Grammar (no more than 2 errors)
  Spelling (2 errors)
  Punctuation, capitalization (2
    errors)
HANDWRITING (CURSIVE)
	ASSIGNMENT REQUIREMENTS
	USED 2 ARGUMENTS FOR AND 2
	  ARGUMENTS AGAINST
	SUPPORTED SOME OF THE ARGUMENTS
	CORRECT LETTER FORMAT
	LEAD IS ADEQUATE
	ENDING IS ADEQUATE
	RECOGNIZE TONE, AUDIENCE
	MOST WORDS CHOSEN FOR EFFECT
	MECHANICS
	  Used paragraphs
	  Grammar (no more than 3 errors)
	  Spelling (3 errors)
	  Punctuation and capitalization
	HANDWRITING (CURSIVE)

2	**1**

ASSIGNMENT REQUIREMENTS
USED 2 ARGUMENTS FOR AND 1
  ARGUMENT AGAINST
LIMITED SUPPORT
1 ERROR IN LETTER FORMAT
HAS LEAD, BURIED TOPIC
HAS ENDING, DOESN'T REDIRECT READER
  TO TOPIC
DOES NOT RECOGNIZE TONE AND AUDIENCE
SOME WORDS CHOSEN FOR EFFECT
MECHANICS
  Paragraphs (may be incorrect)
  Grammar (4 errors)
  Spelling (4 errors)
  Punctuation and capitalization
    (4 errors)
HANDWRITING (CURSIVE)
	1 ARGUMENT FOR AND 1 ARGUMENT
	  AGAINST
	NO MEANINGFUL SUPPORT
	LETTER FORMAT (1 ERROR)
	NO LEAD OR BURIED LEAD
	NO REAL ENDING; HANGING
	INAPPROPRIATE TONE; DOESN'T
	  RECOGNIZE AUDIENCE
	NO ATTEMPTS AT EFFECTIVE WORD
	  CHOICE
	MECHANICS
	  1 paragraph
	  Grammar (6 errors)
	  Spelling (6 errors)
	  Punctuation and capitalization
	    (6 errors)
	HANDWRITING (CURSIVE-POOR)

Figure 4.4 (Persuasive Rubric 4)

allowed the students to score their peers' writing pieces.
Each group was given a set of four to six persuasive writing
pieces that had the students' names removed. During this
phase of the scoring, one student read aloud the piece while
the other group members listened. After the student
finished reading, the group discussed the strengths and
weaknesses of the paper with respect to the pre-established
rubrics. Each member of the group also reviewed the writing
sample for additional errors. Errors were circled on the
writing sample and comments were written on the margins as
well as on a scoring feedback form. Students discussed and
shared examples for their personal assessment of each piece.
Comments such as the following were observed by the
researcher during classroom observations: "This has pretty
good support for his case, the arguments are fair, but there
aren't any strong counterarguments. They should be there.
Plus, I noticed that there in no paragraphing in the whole
letter. I think this, plus the punctuation errors, make it
a 2," or "This probably is a 4, there are no editing errors,
the reasons are clearly stated, the format is correct, I
completely understand the argument and support for the
counterargument."

There were a few times, though, during this portion of
the assessment that the teachers provided immediate support.
In one particular situation, a teacher was needed to clarify

the expectations for the written argument. In this case, the group of students had moved away from assessing the quality of the argument to assessing their personal opinion for the argument. Specifically, the students were assessing a persuasive letter requesting more lunch time and less recess time. The group of students had moved away from evaluating the merits of the argument to whether they liked and agreed with the position. The teacher needed to intercede and provide the following reminder: "Remember your job is to focus on the quality of the paper. You should not focus on the subject of the paper and whether or not you agree with it or like it. Even if you don't agree with the position, don't evaluate the position, evaluate whether there is a solution. You are focusing the criteria that is on your sheet. You may not agree with the writer's position." In a similar situation, another teacher interacted with a group of students who were experiencing the same type of confusion. In this case, the students were losing sight of their overall purpose and were, as in the other example, becoming focused on their approval or disapproval of the topic. The teacher reminded the students that they should not get sidetracked by the issue of whether girls should be allowed to wear hats in school, but should assess the letter based upon the strength of arguments presented.

Overall, the students were able to perform their assessment task with much skill and insight. Whenever a disagreement surfaced within a group, each member shared his opinions, supported his stand by highlighting specific examples in the letter, and listened to other group members share their perceptions. After each member had stated his rationale, a discussion followed and finally a group consensus was reached. Group discussions became highly visible as the students assessed the overall quality of the piece. The students worked as teams to support their findings based upon the established criteria. The results of the scoring were recorded on a scoring form. Each class used the same type of form where students recorded the specific paper that was assessed, the points awarded, and written rationale for the score. Throughout this process of developing and assessing student progress, the students demonstrated the same stages of group problem-solving and decision-making that teachers displayed throughout the year as they reached agreement on group decisions.

Specifically, the teachers implemented the following decision-making model:

- State the Problem

- Think of the alternatives

- Evaluate the alternatives

- Select and implement the alternative (solution)

• See if it works (Montgomery County Public Schools, 1991).

Initially, the problem was presented and discussed. In this case, each group of students vocalized their assignment of assessing the persuasive writing sample as the "problem." Each team member was encouraged to share his/her ideas and opinions about the quality of the writing. When controversy over scoring the piece emerged, students took turns sharing their thought processes and rationale for their score. Students acknowledged each other's stand by comments such as "Oh, I missed that, that is a good point," or "Your idea on the ending is really better, you made a good point. This person really didn't have a strong closing statement. I can see that now." Encouraging each other and analyzing suggestions and ideas paralleled the second stage of problem-solving: brainstorming the alternatives. Group discussion followed with students using specific examples from the letter to support their positions. Through group dialogue and open conversation, each team of students reached a consensus for each persuasive writing sample. Selecting an alternative or, in this case, selecting a score based upon the requirements for the rubrics, paralleled the next stages of problem-solving: evaluating and selecting an alternative. Finally, the students reached a consensus on their choice and implemented their decision. As this

process unfolded, students demonstrated their understanding of the concepts to themselves and their peers. The students became responsible for their learning and exercised control for it through participatory evaluation.

After each group of students had holistically scored the samples papers and had written qualitative comments related to the paper's strengths and weaknesses, they were returned to the teacher. These statements provided valuable information to the owner of the paper and to the teacher. They represented the internalization of both content and process by the students. Prior to each student receiving feedback from his peers, the teachers had each student individually score his paper using the same rubrics. Students were instructed to "evaluate your own piece using the rubrics and criteria that have been used for your classmates' writing samples." Based upon the teachers' instructions, each student assessed his own persuasive writing sample and then compared his score and comments to the score and comments from the group who had scored that particular paper.

Document analysis of student writing rubrics and supporting statements indicated that the students assessed their own progress very similarly to the assessment conducted by the teams of students. The individual students accurately evaluated their own persuasive writing with

respect to the previously established rubrics and criteria. Students were also insightful as to their errors and need for improvement. They noted their own strengths and weaknesses by stating examples found in their pieces. For example, one student evaluated his own progress by stating: "Overall, I would give myself a 3 because I followed the assignment requirement. But, I turned in my second ending late, and I misspelled two words. My margins weren't as even as they should have been." Another student assessed his writing by stating: "I'd give myself a 3 because I had pretty good arguments and counterarguments. I made 2 spelling mistakes and 1 punctuation error." Another student assessed her work and shared the following: "I really feel that I deserve a 4 because I have all of the necessary parts. My leads are strong and support is given. My only errors are punctuation errors where I forgot to divide two words into syllables when I ran out of room on the lines. All of the other parts of my letter are correct. I've support for my stand." One other student provided the following rationale for her self-assessment: "I gave myself a 4 even though I only had 2 arguments. I did have 3 counterarguments which were very strong. I also had 3 solutions instead of the 2 that were required. My format was all correct and I only had 2 misspelled words. It's easy to read and understand my position." The self-

assessment conducted by the students enabled them to become active participants in the evaluation phase of teaching. Instead of the teacher assuming total ownership for the evaluation by marking all of the errors and then returning it to the students, this method encouraged intrinsic participation since the students played a significant role in their own learning through self-assessment. As students become more proficient in regulating their own learning and assessing their own progress, they begin to internalize their accomplishments and learning becomes more meaningful (Yancey, 1992).

The majority of individual students' assessments matched the group assessment. Analysis of both the individual student assessment and the group assessment indicated that the students were able to correctly evaluate the writing selection and to justify the scoring according to the previously established criteria. Whenever there was a discrepancy between the scores, the discrepancy was never more than 1 point in either direction. Often when a discrepancy existed it tended to be in the area of spelling mistakes that were not discovered by either the author or the group assessing the paper. The other area for discrepancy between scores was in the area of support for the paper's position with strong arguments. The concept of "strong arguments" was interpreted somewhat differently from

person to person. However, the majority of students were interpreting the rubrics and corresponding criteria in the same fashion and were assessing the papers very similarly.

Individual interviews with the teachers after students had created and implemented their own rubrics provided additional information related to their goals for the students. Each of the teachers wanted the students to have experiences similar to those they had when they initially created their benchmarks and rubrics last fall. The team of teachers placed a great amount of time and emphasis on internalization of process and concepts throughout their instructional program. They believed that their students learn best when they were actively involved, explained their thinking processes, and evaluated their own success and progress. This particular activity was no different; teachers wanted students to experience the entire process in order to strengthen their metacognitive skills. The group of teachers wanted the students to engage in reflective thinking as a method of increasing their awareness and ability to think better. Teachers also wanted the students to experience reflective behavior in situations where they were able to converse with peers. Group discussions were used to encourage and stimulate thinking. In small discussion groups, students were given opportunities to enrich and refine their own understanding by consulting with

classmates, listening to others' points of view, asking probing questions, and providing justification for their beliefs. As students interacted with each other, the teachers circulated throughout the classroom, responding to students and noting their comments and questions. After the entire process had been completed, the teachers had the following comments to share with the researcher in structured interviews:

> "This was really hard for my kids. They had to defend their own expectations and develop the rationale for their positions. It really showed me who grasped the concept and would be able to internally use it in their writing. The kids really needed to understand the purpose of rubrics, the criteria deemed important in persuasive writing, and the process of evaluating work. This whole process required that the students be able to transfer prior skills and develop new standards. Wow, it was really difficult; but, I am so proud of them. I'd like to expand it to other curricular areas."

Another teacher shared similar thoughts about the experience. During an interview, she acknowledged the difficulty of the process and went on to state:

> "This was a powerful experience for the kids. This gave power and knowledge to the kids. Most of the

time, kids work in voids; they really never know what is expected or how it will be used. This process empowered the students and raised their consciousness of what was important. For the first time, success was in the hands of the students. Now, that is empowerment."

On the same day, a third teacher make the following remark:

"I've never seen my kids focused for so long. They have taken this task very seriously. They are invested and it shows in their knowledge of assessing peers' papers. They definitely have a much, much better understanding of a whole lot of things: persuasive writing, pre-writing strategies, rubrics, assessment, teamwork, and my role as their evaluator. Some kids even asked if they could take the rubrics home and show it to their parents. My kids are really excited about what they are doing. For once, I didn't have to use a big sell to get them to buy into this project. They even asked if they could continue this for the rest of this year and again in sixth grade. They are definitely more motivated about coming to school. I'm really impressed with them and very pleased with their results."

During a follow-up discussion at a grade-level meeting, the team of teachers shared their individual experiences with each other. They also began to focus on next steps. One teacher suggested that the students complete another standard persuasive writing prompt using the rubrics that they had developed. Before the words had barely been spoken, the other three acknowledged their support. The remaining teachers expressed their support for the idea and stated that they had the same idea themselves. Quickly the team began to plan the next writing activity. One teacher commented during the session that "having the rubrics and criteria in front of them will be very helpful. Even though they basically knew my expectations, it wasn't in this format. Now, students will be able to benefit additionally. I'm anxious to see how they do without all of my support." The teachers agreed that they had provided a tremendous amount of support and direction during the six week persuasive writing unit. As one teacher stated, "A lot of them weren't developmentally ready for the task. In order to defend your position and consider alternatives, you have to be at a cognitive level to do so. I'm still not sure all of my kids are there. Yet, some definitely are and I'd like to see what they've internalized from this unit."

The teachers collaborated on the next writing assignment and decided to develop a standard prompt that

would be given to all students during Writer's Workshop.
The teachers also agreed that this prompt would be completed
by each student individually and within three to four
instructional days. After several minutes of brainstorming,
the teachers developed the following standard prompt:

> "In the country of Belize, tropical rain forests are
> being destroyed to create more grazing areas for
> cattle. Plan and write a rough draft of a letter to
> persuade the President of Belize to begin policies in
> his country that will protect the tropical rain
> forests.
>
> When you have completed your rough draft, you will take
> your letter through the rest of the writing process.
> Because you want him to pay serious attention to your
> letter, you will need to be sure all grammar, spelling,
> and punctuation is correct."

In this assignment, the students utilized their
background knowledge and experiences related to persuasive
writing. They also incorporated metacognitive strategies by
preplanning their responses prior to the actual writing,
developing a cognitive map or graphic organizer to provide
an organizational schema, and establishing their own course
of action for their positions. Students also utilized the
pre-established rubrics as guiding principles for their
papers. Personal assessment of their final products

provided the teachers with information related to their attainment of the assignment goals and to their thought processes and decision-making skills.

Since the team of teachers was interested in documenting and assessing student progress with specific regard to the standard persuasive writing prompt that all students completed last fall, they decided to use the prompt from November and the prompt from April to analyze individual growth that had occurred. All data related to this task were assessed by the teachers during a team meeting. The teachers expressed their delight with the overall progress of the students.

Specifically with regard to persuasive writing, the team noted progress in several areas. One of the first areas of growth that was discussed was in the area of writing appropriateness. Students had internalized and demonstrated the importance of strong and supported persuasive arguments that did not depend on oral persuasion techniques. Earlier in the school year, students tended to beg, whine, or plead as a basis for their written persuasive arguments. Teachers were also pleased to describe student progress with style and voice. Analysis of student writing samples indicated that vocabulary words were selected more carefully and chosen for their impact on the total writing. Students incorporated more varied, interesting words into

their selections and tended to avoid repeating those words or ideas once they had been used. As the teachers were discussing the areas of growth, one member of the team stated, "all of the growth is an off-shoot of the whole idea of self-organization and active student involvement. We have had students accountable for their work and I think that we see the results of that accountability in all aspects of their writing." The active student involvement, internalization of preactive processes, and metacognitive skills that students gradually assumed were demonstrated through document analysis of student portfolios.

An analysis of the November standard writing prompt requesting students to write letters to their parents persuading them to allow the students to make their own television viewing decisions was compared with the April standard writing prompt. The latter requested students to write letters to the President of Belize persuading him to begin policies in his country to protect the tropical rain forests. (Information related to the tropical rain forest had been discussed in each class during science instruction.) Teachers reviewed each individual student portfolio and noted specific areas of growth with respect to the previously established benchmarks. For example, one student had written the following persuasive piece for her portfolio entry for November:

"Dear Mom,

I don't understand why you have this restriction for me. I'm ten years old an [sic] know how to make my own choices. I bet you didn't even know that Mary said her mom might ask me to baby sit. Anyways, [sic] Kim asked me to watch Sam and Courtney while they were awake. I'll say that takes a lot more responsibility than choosing my own T.V. shows. Also remeber [sic] all those movies you used to let me watch. Even worse, think of the movies you let me watch now. I really don't watch bad shows. Please! Please! Please!

    Sincerely,

    Sue"

This same student wrote the following response in April:

"Dear President of Belize,

I understand that rain forests in Belize are being destroyed to make more places for cows to graze. What I don't understand is why. Obviously the cows have plenty of space to graze because from what I've heard nobody has ever had a shortage of milk or meat from cows. I know that you need farmland and you get money from what you raise. But if you think the rain forest land is good for crops it is about five years before the nutrients leave the soil. This happens because the

trees put the nutrients into the soil.

Do you know what the rain forests do for us? If you don't I'll tell you. First, they supply oxygen and healthy nonfattening foods that I'm sure you love to eat.

Also have you ever had a family member or a close friend have a deadly disease? If so where do you think the medicine came from? The streets? No! The rain forests! If you cut down this rain forest you are getting rid of very many rare animals. Then when you burn the trees you let an ungodly amount of carbon dioxide into the air. This will effect [sic] the future because my children and me [sic] will not have enough clean air. Think about it.

<div align="center">

Regards,

Sue Johnson"

</div>

Individual assessment of this student's writing samples (fictitious student name) indicated growth toward the portfolio benchmarks. Specifically, this student had internalized and demonstrated self-improvement with leads, paragraphing ability, use of arguments with supportive data, use of counterarguments with plausible solutions, and increased awareness to the audience. The student's self-evaluation indicated her perceptions of her growth by stating: "I have really improved this year with my writing.

The mini-lessons that Ms. J. gave us really helped me with my writing. I know that I have organized my writing better and can support my ideas. I am really aware of my audience. But, I know I still need to work on my topic sentences and closing sentences."

Another student had written the following for her November entry:

"Dear Mom and Dad,

I hate this new restricting [sic] that you put on the T.V. It's not fair. It's not fair because I love the T.V. Say I tell you that you couldn't watch your favorite show and that you could only watch T.V. for an hour! You wouldn't like that. So I'm pleading to you to please say I can watch T.V. for two hours, and watch some good PG-13 movies. Please! Please! Boy, I really love you guys.

Thank you,

Amy"

The same student developed the following entry during the month of April:

"Dear President of Belize,

I have written this letter to ask you to stop destroying the rain forest. You may think the rain forests are not important but they are. The rain forest are the lungs of the planet. The trees recycle

the carbondioxide, [sic] an odorless gas. The trees
are 50% carbon and if they're cut down all of that
carbon is released. Also without the trees to help
stop the rain, the rain will wash away all of the good
planting soil.

When you are sick you're probably taking medicine that
comes from the rain forest. How do I know that?
Because half of the medicines we take come from the
rain forest.

Tell me how you could choose dollar bills over
2,400,000 different species of animals? You think your
[sic] losing grazing area. Well graze cows on your own
land.

I know the biggest problem. It is that your [sic] a
poor country. You need to use your natural resources
for money. But, we can think of other ways to get
money. How about going into another profit making
business? With all of the drugs and medicines in the
rain forest, you could market and sell them. You have
digitails, [sic] quinnine, [sic] philocarpine, [sic]
and taxol available. You also could ask the United
Nations for more support. So please take this into
consideration.

> Thank you,
>
> Amy"

Document analysis of these portfolio samples indicated that Amy has improved on the organization of her ideas and writing. She has developed the concept of paragraphing and its importance to the reader. The style of her writing has also improved and she has internalized the distinction between oral and written persuasion. Even though there were mechanical errors, the student has improved on her overall sentence structure and formation.

Through self-reflection, the student indicated the following: "I am now able to use facts to support my arguments. I try to back up my ideas with information. I don't beg or plead anymore in my writing. That should be kept for oral arguments. I want to continue to improve my organization. Some of my paragraphs aren't that good."

During the final team meeting, the teachers reflected on their year long portfolio assessment project and its impact on student achievement. As the team discussed their views on student progress, they referred to the entries in each student's portfolio. Each teacher pointed out progress that she saw based upon an analysis of the portfolio entries. Individual growth was evident and documented for the other team members as each teacher highlighted specific areas of improvement for individual students (see Appendix H). Near the close of the meeting, one teacher shared her overall thoughts of the progress that her students

demonstrated. She noted:

> "For me, it's clear to see the growth that my
> students achieved this year. It would be hard,
> though, for me to summarize it for the class. I
> could make some generalizations, but this has
> shown me the importance of teaching and assessing
> individuals, not small groups or classes. In my
> room, every child has made solid progress this
> year. Everyone has come away with something,
> especially the process of writing and making
> decisions and learning to depend on yourself. I
> can best describe the progress by describing each
> student rather than trying to synthesize it. It's
> just to individualistic of a project."

As the teachers discussed their ability to assess
individualized progress, the conversation focused on the
importance of teachers maintaining the authority to assess
the students' portfolios using assessment tools that provide
meaningful, relevant information. The teachers emphasized
their commitment to using both holistic and analytic scoring
devices with portfolio assessment. To demonstrate its
value, one team member made the following point:

> "I relied heavily on my comments this year that
> accompanied my scoring sheets. The overall score
> that we did first was helpful because it gave a

holistic interpretation of that child. But, it
was pretty meaningless without my comments and my
partner's comments. Actually, the same is true
for the analytic scores. They were helpful when I
wanted to glance over students' work, but the
comments for each benchmark were really helpful.
I think the written comments and my verbal
interactions with my partner were really the most
important to me. Numbers can be meaningless
unless you can attach or relate them to some
written information."

Another teacher followed with the following statement
related to student growth and scoring devices:

"I've found lately that, when I'm interacting with
parents, I have a whole lot of concrete
information to share with them. A lot of the
information I can recall readily from our monthly
assessment meetings and the other times that I
used the portfolios for planning. For me, I am
able to describe individual student progress and
know where each child needs to head next. This
process is so individualistic, it's like nothing
I've used before. It sure tells me a lot about
each child and each child is able to benefit from
it and grow at his own rate and level."

When the meeting was ready to conclude the researcher asked each teacher to share her reflections of the project. The following comments were given by the teachers:

"Portfolio assessment has enabled us to see definite student growth. We have seen that growth in a new light this year. We've always given typical letter grades, but we've come to believe that they are misleading. You might not see the growth or improvement in a student by looking only at a letter grade. This year, we've been able to see monthly progress and be able to discuss and evaluate it."

A second teacher added the following statement during the team meeting:

"Portfolio assessment has really involved the students in the whole teaching/learning/assessing process. It has meant a great deal more student involvement. In the past, students often saw a grade as something that a teacher 'did to them'. But, with portfolio assessment, students are involved in determining their needs and measuring their own progress. They know the expectations and help make the decisions that affect themselves."

While analyzing the program and discussing the events of the year, a third teacher offered the following statement:

"The most important part of our year long project was being together as a team, planning together, discussing and sharing information, and generating ideas for our kids based upon analysis of their work. This project has helped me to learn right along with my students. I've felt tremendous growth this year. Our monthly meetings have inspired us to read articles and books and share our ideas at these team meetings."

A final comment was made by the other team member who enthusiastically recalled:

"For me, the best part of this project has been the excitement for teaching that it has created. I really feel inspired. We've been able to make decisions based upon our own professional judgments. We've worked very closely together, planned together, bounced ideas off each other, and have developed a much clearer direction for our teaching. I can't wait until next year, we'd like to do this again. Setting goals for students and determining benchmarks by analyzing student work samples really gives us powerful insights into the kids. I think we should always begin our year by developing rubrics for the kids inductively. We feel pretty comfortable with the process and will be able to begin early on next year."

Chapter 5

Summary of Findings, Conclusions, and Discussion

The purpose of this study was to investigate how portfolio assessment contributed to instructional decision-making by fifth grade teachers. To obtain the data for this particularistic case study, four fifth grade teachers and twenty four fifth grade students were selected. Data were collected through observations, informal and formal interviews, audiotapes, and document analysis describing the instructional techniques utilized as a result of monthly assessment of student portfolios.

Summary of Findings

How are inductively derived writing portfolio benchmarks a useful instructional tool for teachers?

The process of developing and assessing portfolios does not contain uniform data. A variety of approaches related to portfolio assessment has been attempted in a number of states. However, the results have indicated that outside raters often found it extremely difficult to score portfolio pieces (Fowler, 1989; Gentile, 1992; Rothman, 1993; Gearhart et al., 1992). Benchmarks and rubrics had been developed by outside agencies and were often imposed upon the student work samples. Many times, the raters found it extremely difficult to score pieces since they did not match the

scoring criteria (Koretz, 1992).

The teachers participating in this study approached the development of portfolio benchmarks from a different perspective. Rather than imposing externally derived benchmarks, the teachers in this study inductively created student benchmarks based upon identified student needs. These benchmarks were developed as a direct outgrowth of coding student writing strengths and needs. Through constant comparative analysis, teachers identified emerging categories which were compared, analyzed, and integrated as new categories developed. Major categories provided a foundation for the benchmarks which served as the framework for data collection and analysis.

Since the benchmarks were grounded in actual student writing samples, they provided relevant, meaningful data for teachers. Overall, the benchmarks served to guide the teachers in the direction of needed instructional change. Specifically, the teachers were able to use the benchmarks during their preactive decision-making sessions. These sessions focused on planning specific writing lessons which included identifying the skill to be taught, format for lesson, materials needed, student participation, grouping arrangement, and follow-up lessons. Teachers focused their planning on the writing benchmarks and instructional tasks which provided more opportunities for students to meet the

established benchmarks.

Early in the school year, teachers focused more of
their preactive teaching processes on short-term
instructional tasks. They emphasized preactive decisions
which were able to be implemented in a few weeks.
Collaboratively, the team developed writing lessons which
focused on identifiable student needs. These needs were
translated into activities (Shavelson & Stern, 1981) which
were assessed at the end of each month. The use of leads,
development of author's voice, expansion of vocabulary,
order of events, point of view, paragraphing, and
grammatical structures provided mini-lesson topics for the
team of teachers. Since the teachers met on a monthly basis
to assess their students' progress, the benchmarks served as
a common standard for discussion and future decision-making.
During each portfolio analysis session, the teachers
assessed the strengths and weaknesses of each writing sample
in both qualitative and quantitative terms. This immediate
feedback enabled the teachers to develop individual and
small group follow-up lessons targeted on specific skills
and processes.

In addition to developing preactive decisions, the
inductively derived writing benchmarks also served to
increase teacher autonomy and empowerment. Since the team
of teachers were given the opportunity to use their skills

and expertise to initially develop the student benchmarks, they felt a sense of ownership and power over their program. Rather than being told to follow outside evaluators' perceptions on what to teach and when to teach it, the teachers were empowered to make their own instructional decisions. The monthly meetings provided opportunities for collegial planning and group decision-making.

One teacher stated the following during a structured interview:

"Our teaching is different this year. We are much more attuned to student needs. We are all working on improving student progress toward the same overall benchmarks; therefore, we've all got the same mind set. For the first time, we have four minds working as one. Even though we meet officially with you each month, we meet with each other much more than that to review our progress as teachers. This year, we really raised our awareness to kids' needs. By developing our benchmarks and assessing the progress, we are given the opportunity to make decisions by what the kids needs rather than what we're told to do by someone else."

Another teacher added the following comment related the benefit of using inductively derived benchmarks:

"We, I think I can speak for my teammates since we've already discussed this, feel much more confident in our

teaching this year. We know we're headed in the right direction since we use student work to guide our planning. Plus, we are given time by you each month to meet and plan our lessons and units. We really know where to head since we've talked about it together. We've been able to bounce ideas off each other, try some out, and basically support each other as we develop new ideas. For myself, I've found it much easier to communicate progress with parents since I have a clearer handle on where I'm going and because I've rehearsed it so much with my teammates. A lot of good is coming out of this project."

As the year progressed, the teachers relied less heavily on the benchmarks as their guiding principle for developing instructional strategies. They were still assessing student growth and progress with respect to the previously established benchmarks; however, they were placing greater emphasis on the implications that the benchmarks had for students' self-monitoring of their own individual progress. A gradual shift in teacher thinking and planning occurred where teachers began to emphasize student empowerment and internalization of instructional and assessment techniques. Since the development of inductively derived benchmarks was a context-dependent process, teachers shared the concept of benchmarks and scoring rubrics with

the students as a way of actively involving them with their learning. The focus for using the benchmarks had expanded to include emphasizing students' complex-level cognitive skills. Near the end of the year, the teachers had modified their preactive decisions from the activity or instructional task (Shavelson & Stern, 1981) which often focused on a particular skill to complex, higher order processes. Teachers' preactive decisions were highlighting executive processes of metacognitive strategies for students. Students began to assume the role that the teachers emphasized earlier in the year by assessing their own progress related to the benchmarks, developing personal goals for improvement, and monitoring their own progress. What evidence is there that teachers' instructional practices change over time by monthly assessment of student writing portfolios?

Results of this study indicated that teachers' instructional practices changed throughout the year as a result of their increased authority related to their decision-making abilities. This project demonstrated the empowerment and autonomy that the teachers developed during their year-long experience with portfolio assessment. Teachers were empowered to develop instructional accommodations, strategies, and lessons to meet specific student needs. Findings from this study indicated that

teachers adapted, modified, and changed their instructional planning and delivery of lessons based upon monthly assessment of student writing portfolios. The change in teachers' instructional practices was gradual and evolutionary. All changes were initiated as a result of analyzing student portfolios. The monthly portfolio analysis meetings provided the framework necessary for collaborative decision-making by the teachers. Teachers worked together cooperatively to encourage cognitive exploration of alternative instructional techniques. As a result of their monthly portfolio assessment, teachers created a monthly Writing Celebration as a way to reinforce and recognize the progress that students were making with regard to designated writing skills and concepts.

Analyzing persuasive writing that students completed early in the year resulted in the formation of a student vocabulary program. As teachers assessed student writing samples with respect to the portfolio benchmarks, they noted that students were not incorporating descriptive vocabulary or voice in their writing. Relating to the benchmark, "Style, Tone, and Voice," teachers created a weekly vocabulary program individualizing the program for student needs and abilities. Teachers' instructional practices related to planning, delivering, and assessing additional content-related material also changed as the year

progressed. Results from this study revealed that after teachers internalized the process of assessing students' monthly writing progress with respect to established benchmarks, they adapted the process for other curricular areas. Specifically, they developed benchmarks and corresponding rubrics for both reading and science. Using the same inductive process, teachers analyzed student samples in both content area, discussed apparent strengths and needs, and collectively created grade level benchmarks and rubrics.

By serving as both the instructional leaders and assessors, the teachers were able to make instructional decisions based upon their own professional judgments. In addition to modifications and adaptations to instruction, results of the study also demonstrated changes in the following areas: assessment, attitude, student expectations, and philosophy. Initially in the study, teachers relied heavily on instructional accommodations and strategies which were directly related to one or more of the inductively derived benchmarks. Teachers analyzed and assessed student portfolios with respect to the benchmarks and created mini-lessons to address the weaknesses that they noted. These lessons were highly specific, focusing on the instructional activity or task. These preactive processes support the finding of Yinger (1979) and Shavelson and Stern

(1981). Teachers were concerned with selecting or developing the activities that would promote greater student progress toward achieving the benchmarks.

However, as the portfolio project continued, teachers expanded their preactive processes to include skills and concepts beyond those relating to the specific lesson or assessment toward a particular benchmark. Greater emphasis on transferring decision-making skills to students emerged. Teachers shifted their expectations for decision-making related to portfolio assessment from the teacher to the student. The format of the monthly portfolio assessments shifted from planning and developing concrete follow-up lessons and units to developing strategies and cognitive processes to empower students to make judgments and decisions related to their own instructional needs. As the teachers shifted their expectations for student involvement in the assessment of portfolios, their attitudes and philosophies toward portfolio assessment also changed.

The attitudinal and philosophical changes were not as obvious or as tangible as the instructional changes. These changes, however, had a more significant impact on the overall program. Up to this point, teachers had changed or adapted their instruction in concrete, systematic measures. They were responding to the specific needs of students with respect to the portfolio benchmarks. However, as the year

progressed and teachers experienced greater autonomy, they shifted their cognitive processes to emphasizing abstract, higher level techniques. As teachers moved toward facilitating students' self-reflection and self-evaluation, they exhibited more reflective behaviors. Teachers were becoming more aware and concerned about increasing students' abilities to monitor and measure their own growth. Teachers were still highly involved with their own assessment of individual student progress, but they were also very interested in promoting greater student ownership in the learning process.

In addition to focusing on instructional adaptations and modifications, teachers also began empowering students to make decisions related to their own progress. Instead of viewing themselves as the sole evaluators responsible for documenting student growth and recommending follow-up measures, they viewed themselves as facilitators who could assist students as they also participated in this process. The teachers placed more emphasis on imparting strategies for students to use to affect and direct their own learning. Teachers demonstrated their belief in student decision-making and empowerment through a well-planned, systematic transfer of power. Students were provided with preactive decision-making strategies to assist them with their own planning prior to task completion. The changes in teachers'

attitudes and beliefs resulted in the formation of a developmental process whereby students gradually assumed responsibility for assessing, evaluating, and recommending follow-up techniques for peers and for themselves. Students became empowered to assess their own writing, reflect on their growth, and plan personal goals for improvement. This socialization process emphasized student decision-making capabilities and provided opportunities for students to actively participate in all phases of the learning process.

The monthly assessment of the writing portfolios enabled the teachers to integrate assessment with instruction in authentic situations. It provided an environment where both teachers and students assumed greater responsibility for the learning program. The continuous feedback related to student progress enabled teachers to develop lessons which emphasized a realistic, meaningful learning context for students. By integrating monthly portfolio assessment with instructional topics, teachers were able to develop purposeful, contextualized tasks which provided for active student involvement in all phases of the teaching-learning process.

How are analytic and/or holistic scales a useful tool for teachers to use during their decision-making processes?

Currently there are many approaches to scoring students' portfolios. Often, the particular form of

assessment is dependent upon the purpose of the portfolio. These purposes can range from celebrations of student work to summative progress to formative evaluations (Gearhart et al., 1992). Scoring of the students' portfolios has often involved holistic scoring, analytic scoring, primary trait analysis, and/or narrative commentaries. One project which utilized analytic scoring was the state assessment program in Vermont which incorporated a variety of analytic scoring devices in five categories. The National Assessment of Educational Progress, on the other hand, has emphasized primary trait scoring as their scoring tool for assessing the pilot portfolio study in 1990. In this type of assessment, the primary trait to be assessed is determined by the test maker who decides what is the most important aspect of writing that should be designated as the "primary" component. Combining two scoring devices was the approach selected by Apple Classrooms of Tomorrow project which integrated both holistic and analytic scoring where the whole portfolio is given one overall general competence score and several additional scores related to various subcategories.

In this particular study, the teachers designed their scoring devices to be coordinated with the design of the students' portfolios. The goal of the teachers was to develop an assessment tool which would reveal each student's

growth and competence related to the inductively derived
benchmarks. Since each benchmark was dimensionalized on a
four-point scale, the teachers selected to include an
analytic scale that provided both qualitative and
quantitative data. The analytic scoring procedures provided
teachers with specific diagnostic information related to
each student's progress and need for additional
instructional lessons. Additionally, the teachers selected
to monitor overall student growth through the use of a
holistic score. The team of teachers believed a measure was
needed to enable them to assess the "total" writing
selection rather than only isolated components. Therefore,
both holistic and analytic scoring devices were employed
throughout the project.

One of the major findings related to the inclusion of
both types of scoring was the highly individualistic
assessment approach that evolved. Teachers became very
aware of individual student progress. As a group, they
indicated the need for portfolio assessment to remain
internally based rather than externally mandated. A
student's individual progress and growth may easily go
undetected by a person who is not familiar with the
student's work or abilities.

Specifically, the teachers revealed the importance of
including and analyzing all drafts and samples leading up to

and including the final written piece. Often, the exclusion
of components of student writing has limited outside
evaluators' ability to score portfolios (Koretz, 1992).
When assessors do not have access to descriptions of the
students' assignment, are unable to match the piece with the
scoring criteria, or are not provided with sufficient
documentation related to the process undertaken by the
students, then it is extremely difficult, if not impossible,
to understand or assess students' performance.

One teacher during a team meeting summarized the views
of the team by stating: "I am able to see growth in each
child's writing. It's evident to both of us (student and
teacher) by analyzing preplanning sheets, rough drafts, and
final products. An outside evaluator may not notice any of
the growth. Or, if he does, he may not know what he is
actually seeing. For example, look at A.J.'s paper. He is
know finally beginning to self-correct. Granted, the
writing is still way below grade level in quality; but, I am
thrilled! This is a learning disabled student who is
progressing. Yet, I don't believe that an outside evaluator
would recognize or appreciate the progress that has
occurred."

Being able to look at the overall quality of the
writing through a holistic approach was highly regarded and
desired by the team of teachers. Continuously, the teachers

described the need to "get a feel for the overall piece" that can only be accomplished through holistically assessing the writing. This particularistic study revealed the importance of holistically assessing the writing prior to analyzing the various analytic components. The teachers found that when they read the entire writing, they were internalizing the overall, natural flow and purpose of the writing. By assessing the various categories later, they were able to readily adapt or create instructional lessons to meet the various identified needs. As one teacher stated during a team meeting, "I read the paper first to get a sense of the overall writing and ability that the student is demonstrating. Then I take the writing apart and analyze every segment. It becomes very clear what the specific needs are and that remains with me. I build on that with my mini-lessons."

The concept of visualizing the writing as a whole and then analyzing its components led to the finding that outside evaluators tend to mainly evaluate or assess the product rather than the process that student demonstrate. Without knowing individual students' strengths, needs, levels, and background, it is highly unlikely that outsiders would be able to document all aspects of student growth.

The concept of assessing and documenting both process and product was emphasized by the teachers. This formalized

way of analyzing growth was shared with students who gradually internalized the process. The use of holistic and analytic scales provided concrete experiences for students to begin the first steps toward self-evaluation and reflection of their own progress. The inductively derived benchmarks and analytic scales served to focus students on various components of their writing.

Additionally, the dimensions within each category, provided a descriptive accounting of expected criteria for each level. Students were able to become active participants in the assessment phase of their own writing by using the scoring devices as scaffolds to support their own learning. The assessment scales provided a foundation for the students to use in assessing strengths and weaknesses in their own writing. By the end of the year, the students were able to integrate the scoring scales with their own self-reflection and evaluation. Students assessed their own progress relative to the previously established benchmarks and were also able to reflect upon their growth and need for further instruction.

Conclusions

The results of this study indicate that portfolio assessment can contribute to classroom teachers' instructional decision-making. This concept may be particularly more valid when teachers serve dual roles as

instructional leaders and assessors. In this particularistic case study, functioning in both roles encouraged the teachers to actively participate in determining the instructional focus for students. Teachers initially were empowered by inductively creating student benchmarks based upon a constant comparative analysis of student writing samples. The benchmarks that emerged were a direct outgrowth of coding student writing strengths and needs. A dimensionalized format using a four-point scale provided a descriptive accounting of expected criteria for each level. Utilizing both analytic and holistic scoring devices provided teachers with specific diagnostic information related to each student's progress relative to each benchmark while enabling teachers to monitor each student's overall progress. The benchmarks and assessment devices served to guide the teachers in the direction of needed instructional change. The benchmarks served as a common standard for cognitive exploration activities. Teachers used them as a focal point in developing instructional adaptations and modifications.

The teachers referred to the inductively derived benchmarks during their preactive decision-making sessions. These meetings resulted in the creation of instructional strategies, accommodations, and techniques designed to meet student writing needs. Initially in the study, teachers

relied heavily on instructional accommodations which were directly related to one or more of the benchmarks. Writing mini-lessons were collaboratively developed to address the designated writing needs. Teachers focused on preactive teaching processes which were short-term and were implemented in a couple of weeks. These lessons tended to be highly specific and related directly to one of the benchmarks.

As the year progressed, teachers' instructional practices gradually changed. As teachers internalized the process of assessing students' monthly writing progress with respect to established benchmarks, they adapted a similar process for other curricular areas. Benchmarks and corresponding rubrics were developed for reading and science through a similar inductive method. The monthly assessment of the writing portfolios enabled the teachers to integrate assessment with instruction in authentic situations. It provided an environment where both the teachers and the students assumed greater involvement and responsibility for the total learning program. By integrating monthly portfolio assessment with instructional topics, teachers developed purposeful, context-dependent tasks which emphasized active student involvement.

Teachers expanded their preactive processes to include skills and concepts beyond those relating to a specific

lesson or assessment toward a particular benchmark. The
teachers placed much greater emphasis on the implications
that the benchmarks had for students' self-monitoring of
their own progress. A gradual shift in teachers' decision-
making and thinking occurred and an increased emphasis was
placed on student empowerment and internalization of
instructional and assessment techniques.

The format of the monthly portfolio assessment meeting
shifted from planning concrete follow-up lessons to
developing strategies and cognitive processes to empower
students to make judgments and decisions related to their
own academic needs. A transfer of cognitive exploration
techniques from concrete, low level strategies to very
abstract, high level techniques occurred. These changes
were embedded with process-oriented goals that were designed
to have students included in decision-making processes.

The socialization process that emerged emphasized
student decision-making skills and empowerment strategies.
At the same time, this process highlighted the attitudinal
and philosophical changes that teachers were experiencing.
Up to this point in the year, teachers were collaboratively
developing lessons and strategies based upon specific
student needs as evidenced by the monthly analysis of
student writing portfolios. During late spring, however,
the teachers shifted their cognitive processes to an

emphasis on abstract, higher level techniques. As the team of teachers moved toward greater student involvement and student self-reflection, they demonstrated more reflective behaviors. They became more aware and concerned about increasing the students' abilities to monitor and measure their own progress.

This transfer of decision-making processes involved the formation of an integrated instructional/assessment system. This system paralleled the system that was created and used by teachers earlier in the school year. Students were provided with preactive decision-making strategies to assist them in their planning for future tasks and assignments. The socialization process was developmental whereby students gradually assumed responsibility for assessing, evaluating, and recommending follow-up techniques for peers and for themselves. As a final step toward student empowerment, metacognitive strategies were encouraged by having each individual student evaluate his own progress by providing both quantitative and qualitative documentation along with each student's personal reflections and future writing goals.

Discussion

The findings listed in this chapter may contain some limitations due to the researcher's role as both principal and researcher. Although the researcher has employed a

variety of strategies, she acknowledges that possible limitations exist. To reduce researcher bias and enhance validity, the researcher has employed triangulation, member checks, long-term observation at the school site, and multiple sources of evidence to increase validity.

The dual role as principal and researcher has permitted access to all events leading up to and including critical moments for data collection. In addition, the researcher's leadership style of participatory management enabled teachers to contribute and participate in all school decisions. A collaborative approach to decision-making provided all teachers with the opportunities to contribute to immediate decisions and future undertakings. The researcher was well known as a principal who emphasized staff involvement in all aspects of the school setting. The principal had already established herself as a classroom "regular" by visiting, and often participating in lessons, on a daily basis. Both staff and students were very accustomed to having her enter and exit their classrooms during the school day.

It is important to note that the teachers for this study were selected because of their heightened interest in portfolio assessment. The entire staff had selected to investigate portfolio assessment as one of their school objectives, however, the fifth grade team had expressed an

increased interest in portfolio investigations. Since these teachers were willing to participate in the project, they were very receptive to ideas and strategies related to portfolio assessment. Over the course of the year, they developed many instructional strategies and processes based upon monthly portfolio analysis. As the year progressed, they adapted their preactive decision-making skills to include strategies for student empowerment. A transfer of teacher autonomy and cognitive exploration was imparted to the students. Students, in turn, were provided with preactive decision-making skills which resulted in greater ownership and empowerment in the learning process.

All four of the fifth grade teachers expressed very positive opinions and perceptions related to the portfolio assessment program. One teacher remarked that "I finally feel as though I know where my kids are academically. Now that I've experienced this, I think I've assumed too much in the past. It's no wonder kids had trouble. I know each of my kids much better and I'm seeing each of them as individuals rather than a class." Another teacher added the following comment during an interview: "Our portfolio assessment project has made my instruction so much better. It's been an incredible experience for the students. We, the student and I, can easily see the growth over the year. A key to our success has been the ability to meet regularly

and to plan lessons that are specifically developed as a result of assessing the kids' actual needs and strengths, rather than following some textbook approach."

Each of the teachers stated that all of their students' had grown significantly in a variety of areas this year. They were quick to note that the students would have shown academic growth over the year even if they had not participated in the project. However, the team of teachers was also eager to point out specific areas where students had gained skills that previous fifth grade students had not experienced. In addition to improved writing abilities, students also (1) increased their confidence in public speaking through the monthly assemblies; (2) advanced their personal vocabulary through the newly developed vocabulary program; (3) enhanced their decision-making skills through collaborative problem solving situations; (4) demonstrated their understanding of various fifth grade skills, concepts, and processes by developing benchmarks and scoring rubrics; and (5) expanded their own metacognitive skills through heightened awareness of personal thinking processes, self-monitoring of progress, self-evaluation, reflection, personal goal-setting.

Recommendations for Staff Development

The following are suggestions for staff development activities and training sessions based upon findings in this

study.

1) Conduct staff training on the philosophy, goals, types, and purpose of alternative assessment. Before implementing portfolio assessment, it would helpful if staff members had a common knowledge base related to the various components of alternative assessment. This training could include a discussion of portfolio assessment as one type of alternative assessment.

2) Provide in-service training directly related to portfolio assessment prior to its implementation. Since there is much controversy related to the development, ownership, purpose, and evaluation of portfolios, it would be beneficial for either a grade level of teachers or staff (depending upon who will be implementing portfolio assessment) to decide on the goals and purpose for their portfolios. The overall format of the portfolio may vary from classroom to classroom and from student to student; however, each teacher or team of teachers should be able to communicate the type, purpose, and goals that they hope to accomplish. Without a framework, portfolios can become a meaningless collection of papers. Training should also be an ongoing component of the project. Staff members should have the opportunity to continue to learn about aspects of portfolio assessment throughout the year. A portion of each staff meeting could be devoted to professional growth

opportunities related to portfolio assessment.

3) A consideration for time and money should be explored. The majority of costs associated with portfolio assessment can be kept at a minimal level. Reference books, periodicals, and newsletters could be purchased and placed in the media center for staff use. If there is no one on staff who is knowledgeable about portfolio assessment, money may need to be designated for a consultant or trainer.

Since time constraints can affect implementation, provide some substitute coverage for teachers to meet, plan, and develop goals for the project should be provided. If half-day substitutes cannot be provided throughout the year, it is recommended that the coverage that is available be used in the beginning of the project. Having time initially to discuss, analyze work samples, and inductively derive goals and benchmarks can enable a project to have a smooth and successful beginning. After school meetings can then be scheduled on a monthly basis. It is helpful to allocate at least one hour for each after school meeting.

4) Design a planning/recording form to document decisions, strategies, adaptations or modifications that may develop during portfolio meetings. This form can serve as a summary of the meeting as well as a reminder of next steps for implementation.

5) Maintain ownership for the project at the local

school level. When outside evaluators or reviewers become involved with assessing students' portfolios, a sense of ownership can be lost. Since the student should be the ultimate shareholder in the portfolio process, he should be actively involved with its development, organization, maintenance, and evaluation. Having the classroom teacher(s) and student involved throughout the process provides greater opportunities for ownership and empowerment in the learning process.

Recommendations for Further Study

Based upon the results of this study, the following recommendations are made for further studies:

1) Additional studies emphasizing formative portfolio assessment measures should be conducted to determine other types of instructional accommodations, strategies, and modifications that are developed and implemented by classroom teachers as a result of continuous assessment.

2) A similar case study investigating portfolio assessment should be conducted by a researcher who is not the principal of the school in which the study was performed. In this study, the researcher served as a participant observer. In a future study, an outside researcher could be used as an observer who was not a partial participant in the study.

3) Additional studies of portfolio assessment should

be conducted where the contents of the portfolio are not limited to the area of writing. This study focused on two genres of writing and did not address other writing intents or curricular areas.

4) Additional studies of portfolio assessment should be done where the contents of the portfolio are based solely upon student selected entries. This study contained writing samples from both uniform writing prompts and student selected topics.

5) Further research using inductively derived benchmarks as a catalyst for teacher decision-making should be conducted. Since inductively derived benchmarks can serve as a bridge to connect instruction and assessment, additional case studies could provide more data related to teachers' cognitive processes associated with planning and making instructional decisions.

6) Additional research studies related to persuasive writing should be done. As a result of creating benchmarks and tailoring instruction to meet student needs, teachers described a major difference in their approach to teaching persuasive writing. In comparing their past methods (using grade level objectives and mandated county curriculum) with their present method (inductively deriving lessons based upon student writing samples), teachers believed that they had not done an effective job of teaching persuasive writing

in past years. Instead, they believe that inductively derived benchmarks which are grounded in actual student writing samples provides a much more detailed and accurate framework for developing lessons. Further research into the effectiveness of inductively-derived persuasive writing benchmarks could provide additional data for educators.

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Appendix A

Data Collection and Analysis Procedures

In this particularistic case study, data were collected from classroom observations held two times weekly during the second semester of school, interviews with classroom teachers, observations and audiotapes of teachers' monthly portfolio assessment meetings, document analysis including student portfolios, writing folders, teachers' lesson plans, and any other documents related to teachers' instructional adaptations. During classroom observations, the researcher recorded data related to the classroom environment, instructional format, presentation style, and student involvement. These data were collected using an observation guide that was developed by the researcher specifically for this particular case study. Similar data collection forms and matrices were developed for the monthly portfolio assessment meetings and for individual teacher interviews. After each data collection session, the researcher wrote narrative accounts of the situation, focusing on the setting, events (both anticipated and unanticipated), instructional focus, participant involvement, and outcomes. Any adaptations or modifications to previously developed materials or lessons were also noted. Simultaneously, the researcher also began writing memos or reflective comments

which provided abstract thinking about the data that were collected.

Categories of concepts related to instructional planning, instructional adaptations and modifications, collaborative decision-making, and curricular decisions emerged through open coding. As additional data were collected weekly, a constant comparative approach of analysis was used to discover additional categories, dimensions, and properties. Initial categories soon became integrated as new dimensions and properties were generated. Coding matrices and recording forms of portfolio assessment meetings and classroom observations were used to construct subcategories and to link these categories to other phenomena observed and recorded.

The development of categories, properties, and tentative hypotheses through a constant comparative method provided a framework that guided further data collection. Axial coding of the data provided a paradigm for describing the conditions, context, action/interactional strategies and consequences of teacher decision-making and instructional adaptations.

Process tracing, stimulated recall techniques and continuous examination of the protocols for interviews, observations, and planning provided data for additional comparisons where new categories were generated, former

categories were linked, and tentative hypotheses related to instructional decision-making by teachers were formed.

Integration of categories and selecting core categories occurred during the selective coding process. During this process of data analysis, an emphasis of constructing categories that were analytical and sensitizing occurred. In this final step of analysis, the category relationships were developed and validated against the data. This process revealed preactive planning decisions, teacher empowerment and autonomy, instructional adaptations, and student empowerment.

Appendix B

Observation Guide for Classrooms

Classroom setting:

    Environment:

    Room arrangement:

Mini-lesson:

    Background information:

    Lesson format:

    Lesson content:

    Length of mini-lesson:

    Follow-up from mini-lesson (individual, paired writing, teacher writing conferences, time allocated to writing):

Students:

    Involvement during mini-lesson:

    Involvement during free writing time:

    Selected students application of mini-lesson content:

Other areas:

    Flow of lesson:

    Unanticipated events:

Appendix C

Preactive Planning Form

Date:

Writing Intent Analyzed:

Format of Writing Selection (student-selected or classroom prompt):

Noted Student Strengths:

Noted Student Weaknesses:

Focus for Instruction:

    Instructional Tasks

    Content

    Materials

    Activities

    Climate

Adaptations to Previously Developed Strategies:

Teacher Comments:

Appendix D

Sample Interview Questions

Experience/Behavior Questions

What types of instructional strategies have you utilized as a result of assessing student writing samples on a monthly basis?

Please share your experiences and suggestions for assessing writing portfolios on a large-scale basis.

Has your instructional program changed as a result of implementing portfolio assessment? If so, how?

Opinion/Value Questions

What outcomes would you like to have occur as a result of portfolio assessment?

What is your opinion of using portfolios for large-scale assessment?

What is your opinion of the grade level instructional adaptations that have occurred as a result of monthly analysis of student writing portfolios?

What do you see as the value of portfolio assessment?

Feeling Questions

Can you describe your feelings about this year long program?

How do you feel when the team in interacting during the

monthly assessment meetings?

Are your comments/ suggestions openly received by other team members?

Knowledge Questions

What have you learned about large-scale portfolio assessment?

How can portfolio assessment affect teachers' instructional decision-making?

What have you learned about developing student benchmarks through the analysis of student writing?

Background/Demographic Questions

Has your prior teaching experiences helped prepare you for this project? Please elaborate.

How have your taught writing in past years?

What other experiences have you had in assessing student writing samples?

Other Questions

Please share with me any other information related to our project that you think would be beneficial for me to know.

Appendix E

Interview Log

Name of Interviewee:

Date of Interview:

Location of Interview:

Tape Position	Respondent's Comments	Respondent's Non-Verbal Communication	Researcher's Notes

Appendix F

Writing Analysis Recording Form

Intent _____ Student _____

Bench Mark	PTS.	Instructional Strategy (skill or concept to be taught)	Comments
Organized Writing		Use of graphic organizers Use of writing leads Order of importance, chronological order, conclusions Flashbacks Completed in allotted time	
Appropriateness of Writing Assignment		Awareness of intent, audience Focus on particular topic Experience with various forms prompts	
Style, Tone, and Voice		Use of figurative language Varied sentence length Varied sentence formation "Show-not-tell" approach Avoid excess (dialogue, metaphors, paragraphs)	
Mechanics and Editing		Type of sentences Word usage Verb agreement Subject/verb agreement Dialogue Punctuation Capitalization	

Appendix G

Vocabulary Program

The following is an excerpt from the December portfolio team
meeting:

Diane: "My kids have not developed a style of their own
         yet. They are pretty bland in their writing. They
         just don't have any style or quality that is their
         own."

Susan: "My kids really need help with voice. They write,
         but as you can see (pointing to persuasive writing
         samples), there is nothing that makes their writing
         unique."

Diane: "The idea of voice may appear on our MSPAP again
         this year. We really should try to focus on it
         after the first of the year."

Jenny: "How can we help the kids develop their own style or
         their own flavor? I'd like to see them have a
         purpose that is reflected in their writing."

Debbie: "In the past our vocabulary and selection of words
         was regulated through our basals and language books.
         With our current approach, we aren't stressing
         vocabulary development like we used to. Maybe we
         need to have a systematic way of doing that."

Susan: "I'm game, how about piloting something for the

remainder of this year?"

Jenny: "Do we want to use vocabulary building books for some of the kids or come up with our own words?"

Debbie: "We've used books before, yet it almost doesn't seem right since our spelling, reading, and writing are so individualistic."

Diane: "I like the individual approach. It really ties in with what we're doing this year and what we're about."

Jenny: "It certainly is in line with portfolios since they are so individualistic."

Diane: "What about word rings?"

Susan: "Or vocabulary notebooks?"

Jenny: "If we did some kind of word ring, we could use bookmarks that the kids could continue to use in their daily work."

Debbie: "I personally like the idea of notebooks. I have the kids maintain other kinds of notebooks and that would work nicely for me. You all don't need to do it that way."

Susan: "I kinda like Diane's idea. Would it matter if I did word rings?"

Diane: "I think we should do what we're comfortable with, especially if we're only trying it out for the rest of the year."

Jenny: "I think that I'll try the notebook idea too. But, I may have the kids develop some classroom posters where we list different types of words that we collect. You know, that way all kids would be exposed to a lot of new words."

Debbie: "I never thought of that. What a neat idea. What kinds of charts would you make?"

Jenny: "I'm not sure. Maybe we could separate them into categories or something."

Diane: "Do you mean groupings like technical, descriptive or adjectives, nouns and things like that?"

Susan: "Or we could get really fancy and come up with some alliteration to represent the categories -- vivid verbs and notable nouns."

Diane: "Just be careful that we don't jump in too fast and lose our foundation. We can always add to whatever we decide on next year."

Susan: "I think I'll use the word ring idea. Is there any money available to buy metal rings, the large ones, for each student?"

Researcher/Principal: "Yes, you may purchase them and give me the receipt for reimbursement."

Diane: "I'm going to try the notebook idea since I've used them so much."

Debbie: "Me too."

Jenny: "I'll do notebooks also, but I think I might use the smaller, marble kind. I think that I also might give the charts a try after we get started."

Diane: "Even though we may be doing the format of this a little differently, I think we should let parents know what we're doing. What do the rest of you think?"

Jenny: "We could do a team letter."

Susan: "I'd be happy to type it after we write it."

Diane: "Let's plan to meet tomorrow at lunch and see what we can come up with for parents."

Susan: "Sure."

Debbie: "That is fine with me."

Jenny: "We can get it written during lunch."

The parent letter was developed and the paragraphs related to the vocabulary program included the following:

"As fifth grade teachers, we have been feeling a lack of vocabulary development in our program and are in the process of trying out some activities to add as standard weekly assignments. We would like to keep the activities as individual as possible in order to keep it on each student's own level, therefore we are asking them to select words from their own reading. These words can be completely new and unfamiliar, or words whose meanings they do not know even though they have

heard the word before.

The students are asked to collect five words weekly on index cards which they use as bookmarks. They are to write the definitions (sentence varied depending upon individual teacher's format) as the week progresses and turn the completed definitions in on the following Monday. The students have time to complete one definition each day after DOL if they make efficient use of their time and are not late arriving at school. This becomes weekend homework only if the definitions are not completed in school. We will use these words periodically through the grading period for other vocabulary activities. In addition, they can be added to the student's individual spelling lists if desired."

Appendix H

Student Progress

The following is an excerpt from the June portfolio team meeting:

Diane: "I feel really good about this scoring. We are right on the money with each other. Debbie, you and I picked up on the same kinds of things for the kids. You know I wasn't sure how to score that one piece from Ricky that was just a lot of jokes. He had the right intent of "Expressing Thoughts and Feelings" but it was difficult to score. I think that's why I like having both student selected and focused prompts. With the focused prompts I really know what to expect from your kids and from mine."

Debbie: "I struggled with the joke story too. It just didn't seem to fit in with the types of stories or entries that we've had this year. But, it certainly represents his ideas and it can be assessed using the benchmarks. It's probably good that we write comments along with each scoring scale because they really are what give us the information."

Diane: "Can we use both types of scoring next year?"

Researcher/Principal: "Yes, you can use both scoring devices since they have provided you with such valuable information about student

progress."

Susan: "Jennifer and I scored our students' entries the same. When you think about it, it's really amazing. I looked over the portfolios last night and really saw growth in all of my students. Actually, it was easier to see progress for my low and middle range students. My top kids did well, but they were doing well with their writing even in September."

Diane: "I can see much more evidence of growth with my low and middle kids too. With these kids, it's pretty clear when they have improved since it's right there in their writing. With Tommy and Kevin for example, neither one of them displayed much organization in their earlier writings. They tended to ramble on and jump from idea to idea. Gee, now they have a pretty clear picture of how to organize their thoughts and how to formulate paragraphs. The same is true for my other kids. I can share how each improved and it really varies from student to student. If I were to say any general or overlapping categories for growth it would be in the area of supporting their ideas and developing their stories. I can honestly say that everyone improved in those areas but the degree of improvement really depended on the individual student."

Jenny: "My kids also progressed this year, especially the
kids who weren't great writers before. These
'leisurely writers' really benefited from our
approach. It really provided individual support and
feedback that they were able to use. I'd say these
low to average kids gained the most. My top kids
probably gained the most in their ability to reflect
and select appropriate goals for themselves. Their
writing also improved, but I don't see the growth
being as visible as with my 'leisurely writers.' I
am looking forward to seeing next years' kids and
what their needs and strengths are. I feel ready to
address their needs."

Susan: "The top kids really kept me on my toes. I found
that I really needed to pay very close attention to
their errors. They usually didn't make a whole lot
of them. So I ended up working with them on
extending their writing and really increasing their
vocabulary choices."

Debbie: "I still can't get over the progress with Jamie. He
is a learning disabled student and he has really
done well. He can now self correct his writing and
find some of his errors. That is a major
accomplishment for him. I only hope his next
teacher is able to see that kind of progress with

him. I know someone who never worked closely with him probably wouldn't notice it."

Susan: "I really like the idea of talking about the kids as individual kids. It's hard to summarize them as a group because they really aren't. They are a group of individuals and their progress really shows that. I like being able to measure and describe that growth. It's so unique to each child and each child has demonstrated growth over the year.

Diane: "I think that is the biggest advantage to portfolio assessment, we can see individual growth and so can each child. It really has energized me and my teaching. I also agree with Jennifer, I'm ready to repeat the process that we used this year with next year's kids. It will be very interesting to find out if their needs are similar to the needs of these kids. I guess we'll know that in a few months from now."

Appendix I

Data Collection Schedule

October: Narrative Writing Piece (focused prompt to provide core writing samples)

Nov/Dec: Persuasive Writing Piece (focused prompt to provide core writing samples)

January: Narrative Writing Piece (student selected from classroom writing folder)

February: Persuasive Writing Piece (student selected from classroom writing folder)

March: Narrative Writing Piece (focused prompt to provide core writing samples)

April: Persuasive Writing Piece (focused prompt to provide core writing samples)

May: Narrative Writing Piece (student selected from classroom writing folder)

June: Persuasive Writing Piece (student selected from classroom writing folder)

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