THE RESEARCH

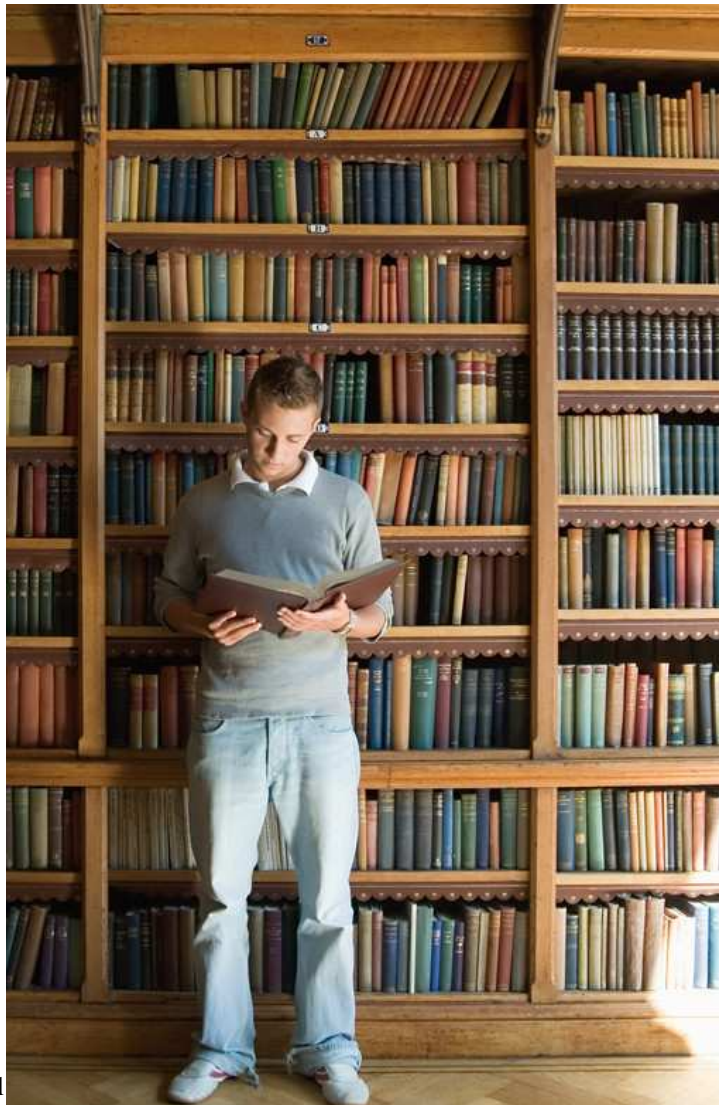6+1 Trait® Writing Assessment Summary Study Results

Northwest Regional Educational Laboratory
School Centers for Classroom Assessment Final Report 1992-93

Grade 6, Kent School District, WA 1996-99

Grade 4 Holistic Score Comparison - Saudia Arabia 1996-97

K-5, Jennie Wilson Elementary, KS 3-Year Study

3rd Grade - Hartly Elementary School, DE 1999-2000

6+1 Trait® Writing Assessment Summary Study Results
Northwest Regional Educational Laboratory

Time Frame of Development

The 6+1 Trait® Writing Assessment model was originally developed in 1985 in response to teachers' needs to have more useful assessment tools that closely mirror effective writing instruction. NWREL's continued development and refinement of the model has been a partnership with many, many schools, teachers and language arts specialists. This year, the on-going development resulted in two new products: *6+1 Traits of Writing: A Model That Works* (an eight part training video series distributed by Carson Dellosa, Inc.), and *6+1 Traits of Writing: The Complete Guide* (published by Scholastic, Inc.).

Description

The 6+1 Trait® Writing analytical model for assessing and teaching writing is made up of seven qualities that define strong writing. These are: (1) Ideas, the heart of the message; (2) Organization, the internal structure of the piece; (3) Voice, the personal tone and flavor of the author's message; (4) Word Choice, the vocabulary a writer chooses to convey meaning; Sentence Fluency, the rhythm and flow of the language; (5) (6) Conventions, the mechanical correctness; and (7) Presentation, how the writing actually looks on the page. *Presentation*, the "+1" trait, is the latest trait added to the model.

Working in collaboration with NWREL in the early 1980's, creative teachers in school districts across the country decided there must be a better way to gather useful information about student writing performance than with single scores or standardized tests. After evaluating thousands of papers at all grade levels, the teachers identified common characteristics of good writing. These qualities became the framework for 6+1 Trait® Writing.

Traits are the foundation for the NWREL's writing assessment model and the basis for the descriptive criteria we use to define the qualities of good writing at different levels of achievement. The scoring guides and anchor papers provide the consistency of applications of the model across raters and schools. Once teachers know the traits well and develop good consistency in using the scoring guides, the link to instruction becomes clear.

The 6+1 Trait® Writing Model provides teachers with an organizational structure for teaching writing. By providing specific feedback to students and teachers about the qualities and needs in students writing, writing instruction and learning can focus on improvement of specific writing skills. Traits give students and teachers a language to talk about the quality of writing. This connection between effective writing instruction and the assessment of student writing contributes to the success of this model in creating effective writers.

Evidence of Effectiveness
The following are examples of the studies and results of the implementing the 6+1 Trait® Writing Model.

TRAIT EXAMPLE 1

6+1 Trait® Writing Research
Study Findings on the Integration of Writing Assessment & Instruction*
School Centers for Classroom Assessment Final Report, 1992-93, NWREL publication.

The Question. Would it make a difference in analytic writing testing results to purposefully weave assessment strategies into the writing curriculum? In other words, can we document differences in writing performance between two groups of students–one group that was systematically taught how to use the 6+1 trait analytic assessment scoring criteria as a tool for revision, while the other group participated in traditional writing process instruction without using an assessment component as a strategy for revision?

The Sites and the Work. During the 1992-93 school year, six fifth-grade classrooms in the Portland area were selected as study sites to determine the effect of teaching the six analytic traits to students. These classrooms represented diverse student populations from rural to urban communities, native and second-language English speakers/writers, and a diverse range of ethnicities.

Three fifth-grade classrooms were randomly selected as "control sites"; places where a pre- and post-writing assessment would take place, but teachers would continue to instruct and assess without any intervention on our part. Our role in these classrooms was to observe and document the current practice of teaching writing.

The remaining three sites became "study sites"–classrooms where we systematically visited the classrooms, taught students the traits and how to assess their own and others' writing. Lessons specifically designed to show the link between the traits and revision skills were taught, with an emphasis on the traits of ideas, organization, and voice. These classrooms also participated in a pre- and post-assessment.

The Results. The results strongly indicate that direct instruction linking assessment and instruction makes a considerable difference in writing performance. The following table contains pre- and post-assessment averages for the study and control sites:

Trait	Group	Pre	Post	Gain
Ideas	Study	2.54	3.38	+.84
	Control	2.68	2.75	+.07
Organization	Study	2.60	3.15	+.55
	Control	2.61	2.70	+0.9
Voice	Study	2.73	3.60	+.87
	Control	2.91	3.12	+.21
Word Choice	Study	2.73	3.26	+.53
	Control	2.91	3.11	+.20
Sentence Fluency	Study	2.85	3.12	+.27
	Control	2.87	2.89	+.02
Conventions	Study	2.79	2.98	+.19
	Control	2.89	2.99	+.10

Note: The last two traits are victims of the "not enough time" syndrome. The school year slipped away so fast that less time was spent on teaching the last few traits–and the scores reflect it, too!

School Centers for Classroom Assessment Final Report
1992-93

Objective: To address important needs for classroom assessment by demonstrating the improvements in student learning associated with improved teacher instructional decision making.

Introduction

The purpose of the Classroom Assessment program is to address important needs for classroom assessment by demonstrating the improvements in student learning associated with improved teacher practice. We believe that good assessment skills are increasingly crucial to teachers because of a return to professionalism, an increase in site-based management, and the power that good assessment has for improving the education of students.

The goals for the Classroom Assessment program are:

1. Explore the circumstances that would support increased levels of training for teachers on classroom assessment.

2. Provide training and technical assistance to teachers to improve classroom assessment.

3. Develop on-going working relationships with teachers and buildings to promote classroom assessment.

4. Document the effect that intensive classroom assessment training and help has on students and the culture of the school.

Accomplishments

The evaluation from last year's effort indicated that the original idea of a service center approach was only moderately successful. As a result of this analysis, project activities were redesigned. The new design calls for more intensive help in a narrower range of topics. Specifically, the redesign called for:

1. Provision of more curriculum-based materials to support instruction;

2. Extensive on-site classroom visits to support and observe instruction;

3. More intensive help in a narrower range of topics; and

4. Delivery of services in such a way that it saves teachers' time.

To these ends, the following activities were undertaken:

Activity 1: Intensive assistance to teachers on a narrower range of topics

This year three study sites were chosen for intensive team teaching in the area of writing assessment. The three sites consisted of one fifth grade classroom at each of the three schools: West Tualatin View Elementary, David Hill Elementary, and Schuebel Elementary.

Teachers at these schools were given a one-day training session on the 6+1 trait analytical model for assessing writing. This was followed by eight visits to each classroom to assist teachers to implement this model in the classroom. Specifically, each visit concentrated on how to teach students to be self-assessors of writing and how to use performance-based writing assessment to better monitor student progress and plan instruction.

The content of the visits was based on an "audit" done at the beginning of the study to assess the training needs of teachers and the writing abilities of students. The audit consisted of collecting writing samples from students and interviewing teachers.

The pretest means are shown in **Table 1**. (These are the means for all students tested at pretest time. The number of students in **Table 2** are fewer because **Table 2** involves students there at both pre and posttest.) **Table 1** shows that, while there is some variation across classrooms, student means within classrooms were fairly even. The first three traits tended to be somewhat lower than the final three traits. The decision was made, therefore, to train students on the traits in the usual manner, beginning with ideas.

Table 1: Pretest Means on Writing Traits for Study Sites

	Class 1 (N=21)	Class 2 (N=19)	Class 3 (N=22)
Ideas	3.1	2.3	2.7
Organization	2.8	2.3	2.5
Voice	3.4	2.4	2.4
Word Choice	3.0	2.6	2.8
Sentence Fluency	2.9	2.7	2.7
Conventions	2.9	2.7	2.8
Mode	3.5	2.1	4.3

Activity 2: Develop materials teachers can use in the classroom to improve assessment

This year, several development efforts occurred:

1.   **Classroom Applications of Writing Assessment**. These materials were prepared and pilot-tested with the teachers in the impact study. The materials include 6+1 trait scoring guides that students can use to assess their own writing, lesson plans organized around the 6+1 traits, and samples of student papers that teacher could use as examples with students.

2.   **Portfolio Workshop**. Part of the redevelopment of the workshop *in Using Portfolios of Student Work in Assessment and Instruction* was done for the classroom assessment project. The resulting two-day training package is designed to illustrate a model of integrating assessment with instruction that can be used in the classroom to improve both instruction and assessment.

3.   **Technical Writing Workshop**. This evolved into a tech-prep adaptation of the portfolio workshop. In this adaptation, samples of technical writing and tech-prep portfolios are substituted for the more general samples in the portfolio training materials.

Evaluation

Study Sites and Training Content

A study was conducted to determine the impact on student achievement in writing of intensive training for teachers on writing assessment and integrating assessment and instruction. Six fifth-grade classrooms (one was a grade 4-5 combination) were recruited to represent a range of learning contexts (rural/urban, size of district, size of school, student expenditures) and student types. These were then randomly assigned to either a "experimental" or "control" condition.

In October 1993, participating teachers in the treatment classrooms received one day of training on writing assessment and integrating writing assessment into instruction. This training included definition of each of the traits (Ideas, Organization, Voice, Word Choice, Sentence Fluency, Conventions), opportunity to practice assessing student writing for each of the traits, plus instruction in how to teach the traits to students in the classroom, including training students to be self-assessors of writing, and mini-lessons in each trait.

Teachers also received an extensive set of training materials to serve as a resource throughout the year. Materials included scoring guides written for teachers and others written for students at the fifth grade level, plus sets of classroom activities designed to

help students develop skills in each trait. In addition, teachers were provided with sample student essays to share and discuss with their students, and lists of strategies for successfully teaching students to become self-assessors using the 6+1 TRAIT analytical model.

Each treatment site then received eight site visits to assist teachers to implement the strategies provided during the initial training session. The first visit ended up becoming a general overview session for students and the start of training on the trait of Ideas. The next two visits concentrated on the trait of Ideas. This was followed by two visits on each of the traits of Organization and Voice. The final visit was a wrap-up and debrief. The final three traits (Word Choice, Sentence Fluency and Conventions) were mentioned but not addressed in any depth.

Each control classroom was visited three times to determine how writing instruction occurred. Staff simply noted the kinds and amount of writing instruction provided by teachers, and asked questions about their normal strategies for writing instruction. This information was used to determine the extent to which instruction in the two treatments was different.

(Note: At the end of the study, teachers and other interested staff in the control schools also received a one-day training on writing assessment and the packet of instructional materials.)

Achievement Measures and Study Design

Prior to the beginning of the study (November 1992) and at the end of the study (April 1993), students in each of the six classrooms wrote essays using the usual conditions of the Oregon Writing Assessment: three 45-minute periods with assigned prompts. Students had time to pre-write, create a rough draft, read over the rough draft and revise, edit and produce a final copy. Students were allowed to use dictionaries or other written references during testing, but could not confer with the teacher or with each other. Two prompts were used: expository and narrative. The prompts were written to allow a variety of interpretations and approaches. At pretest time prompts were randomly distributed in classrooms. At posttest time students wrote to the prompt that they did not receive at pretest time. This controlled for differences in prompt difficulty.

Pretest information was used to plan instruction in the three treatment classrooms. Since these pretests were also used at the end of the study to measure impact on students, they were rescored by other raters along with the posttests. For the impact study, we controlled for possible rater bias by removing paper identification, mixing pre and posttest essays, and randomly distributing them to readers.

Data were analyzed using six (one for each trait) repeated measures (matched pre and posttest scores) analyzes of variance. Pre and posttest means are shown in **Table 2** and statistical results are shown in **Table 3**.

Table 2: Means of Treatment Groups on Pre and Posttests

Trait	Group	Pre	Post
Ideas	Experimental	2.54	3.38
	Control	2.68	2.75
Organization	Experimental	2.60	3.15
	Control	2.61	2.70
Voice	Experimental	2.73	3.60
	Control	2.91	3.12
Word Choice	Experimental	2.73	3.26
	Control	2.91	3.11
Sentence Fluency	Experimental	2.85	3.12
	Control	2.87	2.89
Conventions	Experimental	2.79	2.98
	Control	2.98	2.99

Table 2 shows that pretest scores for the experimental and control groups are very similar on all traits. The treatment group gained the most on traits receiving the most emphasis in instruction. Performance on other traits gained slightly. Students in the control group gained slightly on two traits, and remained essentially the same on the other four.

Table 3: Analysis of Variance Results

Trait	Source of Variance	SS	DF	MS	F	Significance
Ideas	Within + Residual	126.44	131	.97		
	Group	3.84	1	3.84	3.98	.048
Organization	Within + Residual	128.23	131	.98		
	Group	3.01	1	3.01	3.08	.082
Voice	Within + Residual	114.94	131	.88		
	Group	1.4	1	1.4	1.59	.209
Words	Within + Residual	60.85	131	.46		
	Group	.02	1	.02	.04	.839
Sentence Fluency	Within + Residual	117.29	131	.90		
	Group	.60	1	.60	.67	.414
Conventions	Within + Residual	177.79	131	1.36		
	Group	.72	1	.72	.53	.466

Table 3 shows that gains between the experimental and control groups were significantly different for Ideas, approach significance for the trait of Organization, tended toward significance for the trait of Voice and were non-significant for the remaining traits.

Discussion

It is interesting to note that student scores improved on traits in proportion to the amount of time spent on them and the order in which they were introduced. Thus, students showed the most improvement on Ideas, the trait introduced first; an almost significantly different gain on Organization, the trait introduced second; and a slightly lower gain on Voice, the trait introduced third. There was no significant difference in gains on the three traits which were not directly taught to students. This certainly lends credibility to the premise that student writing improves to the extent that we address instruction at the features of writing we deem to be the most important, and to the extent that we directly teach students what good and poor writing looks like on each of these dimensions.

One possible objection to the study design might be, "Of course students in the experimental group do better than those in the control group because they were directly instructed on the traits used in the test. We know that direct instruction on the test will improve scores. The real question is whether writing improves." And how do we decide that writing improves? The only possible way is to make a direct professional judgment of
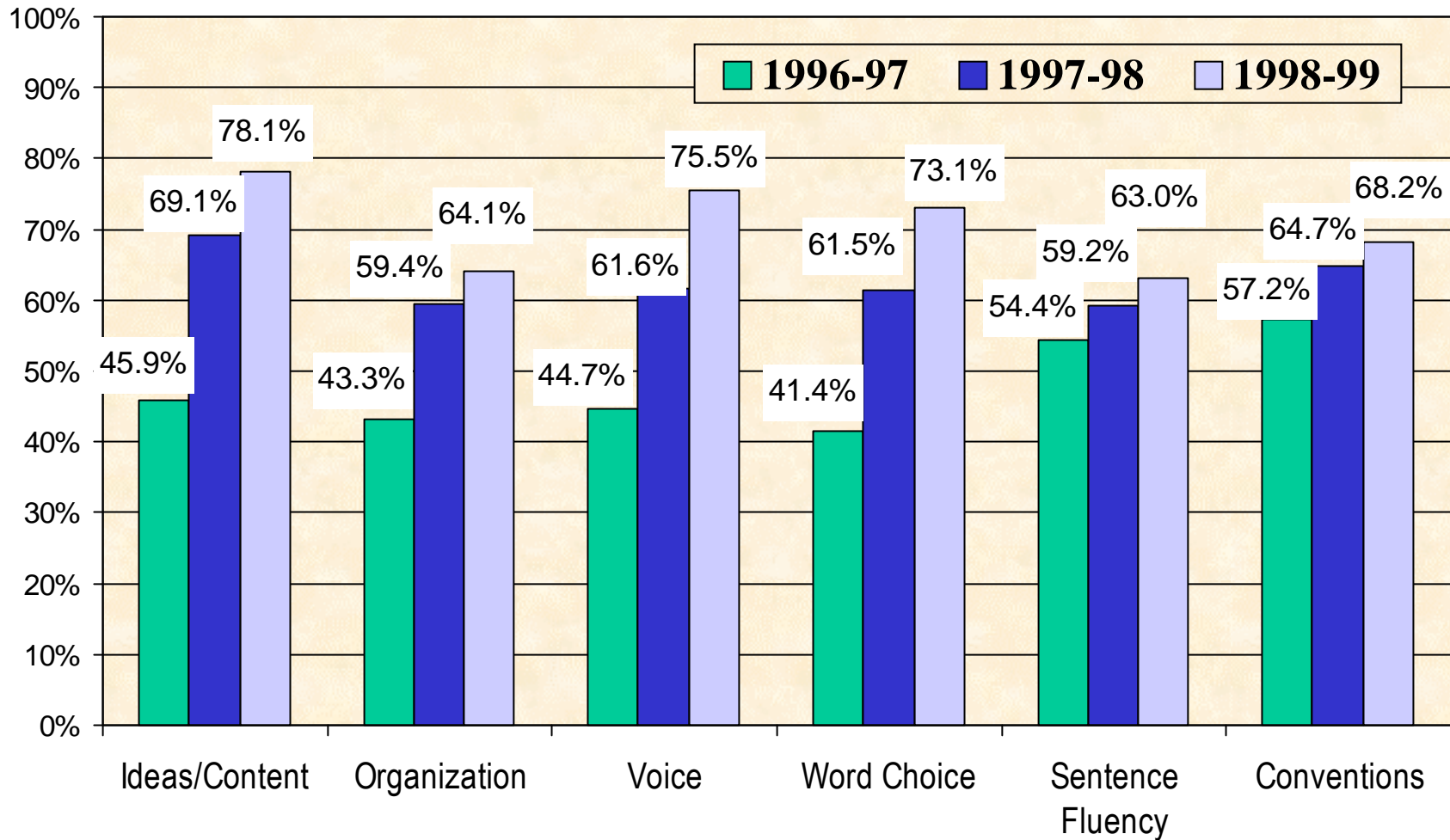
whether this is the case. We contend that the 6+1 trait model is the best available means of making these determinations. If, in fact, the 6+1 trait analytical model does define what we mean by good writing, then improvements on the traits is a *direct* measure of improvement in writing. The direct, professional judgment of the quality of writing is what the 6+1 trait model is all about.

Therefore, this study does not involve "teaching to the test," it involves "teaching to the criteria." Therein lies the power, and, in fact, the whole point of the technique of teaching clearly defined performance criteria directly to students. If, in fact, the 6+1 trait model defines what we value in writing, then teaching them the traits teaches them, by definition, what good writing is. This study tends to support the conclusion that, as the result, student writing improves. Therefore, we can impact student achievement by improving classroom assessment techniques, teacher skills in using them, and student self-assessment.

TRAIT EXAMPLE 2

Kent School District, WA: 1996-97, 97-98, 98-99

Grade 6, 6+1 Trait Analytic Writing Assessment, Percent Rated "3" and Above

Legend: 1996-97, 1997-98, 1998-99

Trait	1996-97	1997-98	1998-99
Ideas/Content	45.9%	69.1%	78.1%
Organization	43.3%	59.4%	64.1%
Voice	44.7%	61.6%	75.5%
Word Choice	41.4%	61.5%	73.1%
Sentence Fluency	54.4%	59.2%	63.0%
Conventions	57.2%	64.7%	68.2%

TRAIT EXAMPLE 3
The Saudi Arabia/ARAMCO School
Gaye Lantz, Curriculum Director

The Saudi Arabia/ARAMCO School adopted the 6+1 Trait Writing Model for the 1996-97 school year. The comparison of the district fourth-grade student writing performance is presented in the following table. The table reports the percentage of students at each level of performance, based on the Districts standards of writing performance.

Percentage of Students by Level of Writing Performance

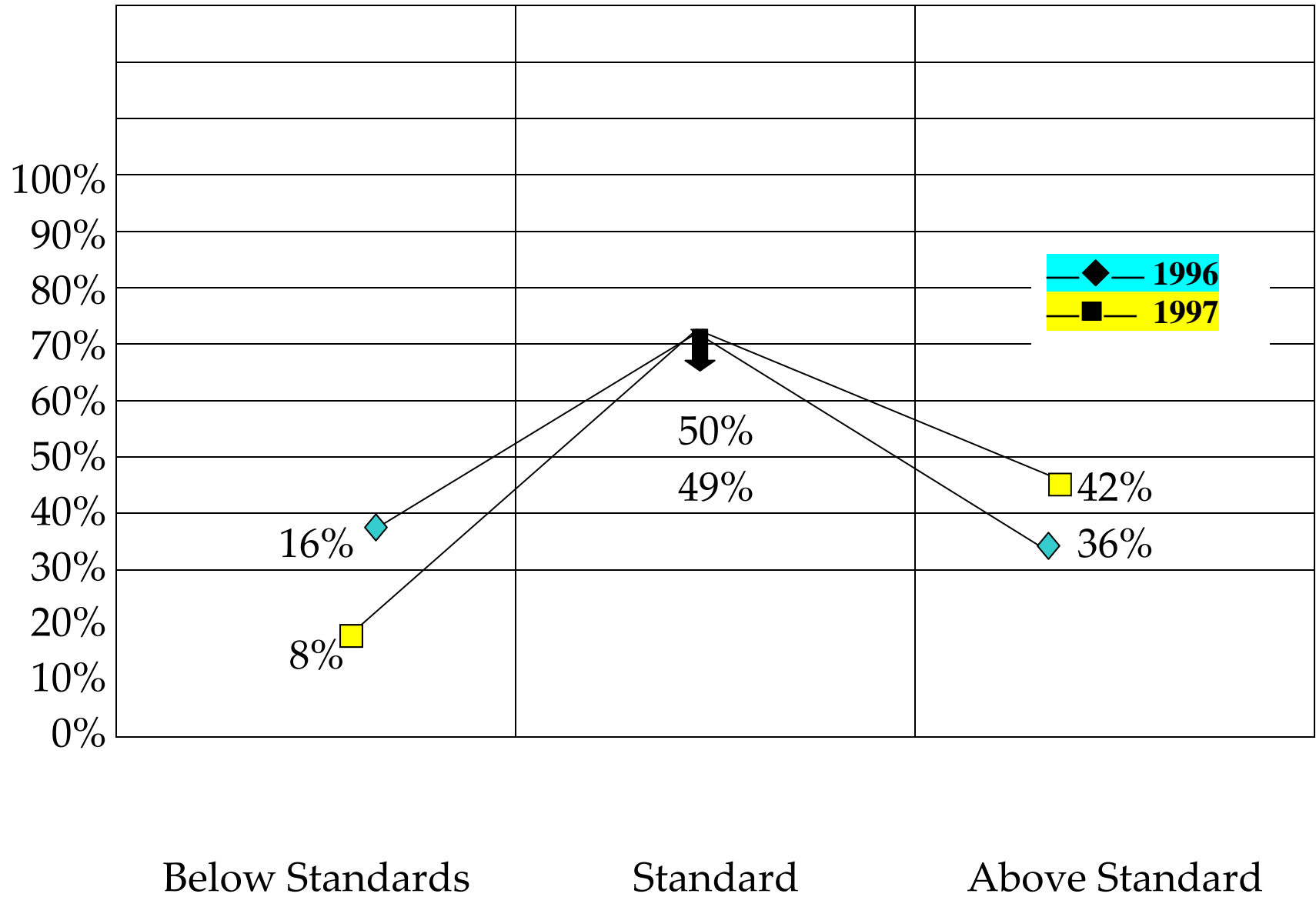| Level of Performance	Fall 1996	Spring 1997
Below Standards	16%	8%
Meeting Standards	49%	50%
Above Standards	36%	42%

Saudi Arabia District Profile Pilot SAS Writing Assessment - Grade 4

	GRADE 4→ 1996 RESULTS				GRADE 4→ 1997 RESULTS		
	Holistic Score	Score Totals	%		Holistic Score	Score Totals	%
47% >3	5	1	0.5	35% >3	5	12	6
	4.5	4	2		4.5	6	3
	4	37	18		4	37	20
	3.5	28	14		3.5	22	12
49% = 3	3	98	49	49% = 3	3	95	50
	2.5	9	4		2.5	6	3
	2	13	6		2	8	4
	1.5	1	0.5		1.5	1	1
	1	3	1		1	0	>0
4% < 3	0	7	3	15% < 3	0	0	0
0	Total Students Tested	201	100%		Total Students Tested	187	100%

Saudi Arabia District Profile
Pilot SAS Writing Assessment/Grade 4

Legend: ◆ 1996, ■ 1997

Data points:
- Below Standards: 16%, 8%
- Standard: 50%, 49%
- Above Standard: 42%, 36%

Categories: Below Standards | Standard | Above Standard

TRAIT EXAMPLE 4

6+1 Trait Writing Model Improves Scores at Jennie Wilson Elementary

Deb Jarmer, Maurine Kozol, Sheri Nelson, Trudy Salsberry**

About the School:

Jennie Wilson Elementary School is located in Garden City, a community in western Kansas experiencing a rapid shift in demographics. It is one of the fastest growing towns in Kansas and there has been a large increase in the number of minority families. Asian and Hispanic families now comprise nearly 50% of the total population of Garden City, and at Jennie Wilson the Caucasian student population is in the minority. In the last school improvement cycle, the faculty at Jennie Wilson observed that scores on the state writing assessment, the California Test of Basic Skills, and teacher observation data pointed to a need for improving student writing skills. At that time they adopted the 6+1 Trait Writing Model as an intervention for all grade levels. Teachers agreed to use the model for both instruction and assessment.

What Were the Results?

At Jenny Wilson Elementary, all students completed a local assessment and fifth graders participated in the Kansas Writing Assessment (both were narrative writing samples.) The fourth graders completed the California Test of Basic Skills (CTBS), while student portfolio assessments were maintained in grades four and five. The Kansas Writing Assessment scores reflected a weakness in the areas of fluency and conventions. Overall, CTBS scores were lowest in language expression. The NCA team chose to implement the 6+1 Trait Writing Model as an intervention to address language expression (ideas, organization, voice, word choice, fluency) and mechanics (conventions). Building level pre and post test writing assessments were administered K-5. Fall to spring growth and spring to spring comparisons were made. Growth percentages were determined between the beginning and end of the cycle. Student mastery was noted on a rubric scale form 1-5. Scores of 3, 4, and 5 were acceptable.

After three years, Jennie Wilson Elementary reported improvement occurred each year after the model was used. The fifth grade scores were equal to, or higher than, district and state averages. By grade level, the students increased their scores (moving from a 1 or 2, to a 3, 4, or 5) on the average of 54% for kindergarten when writing or dictating a story: 92% for first grade in narrative writing; 54% for second grade in narrative writing; 68% in third grade in narrative writing; 40% in the fourth grade in narrative writing; and 42% for the fifth grade in narrative writing. State assessment scores and CTBS scores also increased in language expression and mechanics.

TRAIT EXAMPLE 5

Pre- and Post-Assessment Comparisons of Hartly Elementary School
Third-Grade Students Writing Performance

Ursula White, teacher, and James Merriweather, Dover Bureau reporter
(jmerriweather @delawareonline.com

Hartly Elementary School has achieved the highest statewide writing scores in the state of Delaware using the 6+1 Trait Writing Model . The pre- and post-assessment comparison for cohort third-grade students are reported in the following table:

Trait	September 1999 Writing Sample*	March 2000 Writing Sample*	Gain
Ideas	1.67	3.75	+2.08
Organization	1.83	3.88	+2.05
Word Choice	1.54	3.33	+1.79
Voice	1.54	3.63	+2.09
Sentence Fluency	1.50	3.42	+1.92
Conventions	1.79	3.63	+1.84

- **Writing Samples scored using the five-point scoring guides.**

Evidence of Transportability

The 6+1 Trait® Writing Model is now used in virtually every state in the country not to mention France, China, Great Britain, Venezuela, Bahrain, Australia, Turkey, and the Middle East. It is the model or the source of the model used to score student papers in numerous state assessments and district assessments in virtually every state. Teachers from primary though college have embraced the 6+1 Trait model and not just English teachers, either. The traits are used across the curriculum by teachers of mathematics, science, social studies, foreign language, art, and music – anyone for whom writing is an important part of instruction.

The model has been disseminated through training of trainers, direct technical assistance to schools, the production and distribution of innovative products and training resources, including text, video, and Internet presentations (http://www.nwrel.org/assessment). Teachers teaching teachers with strong Laboratory staff support has been the most effective route to dissemination and implementation of this model in literally tens of thousands of classroom nationally and internationally. And our work is not done.

The link to instruction has become so real and so powerful that master teachers continue to utilize and refine the model after years of application while other educators are just beginning to

discover it for themselves. NWREL staff continues this good work by updating scoring criteria, developing new instructional materials, and attending to staff development needs of educators across the globe.

Workplace Skills

The following in rank order, are the skills needed for effective job performance in the workplace as identified by **The Boeing Company**:

1.   **Writing Proficiency**
     Without exception, effective writing was noted by all types and levels of workers and managers as the essential attribute of an effective employee. The ability to communicate clearly and concisely with proper organization, sentence fluency, and accurate mechanics is critical. A compilation of some of the types of writing exhibited in the workplace includes summaries, procedure manuals, activity reports, persuasive reports, tables of contents, proposals for new business, memos, e-mail, marketing and sales reports, formal and informal letters, and news releases.

2.   **Ability to work in a team environment**

3.   **Mathematics competency** (emphasizing problem solving, critical thinking, estimating, predicting)

4.   **Effective communication** (speaking and listening)
     Communication skills are central to pitching innovative ideas, contributing to team activities, and resolving conflict.

5.   **Reading comprehension** (following directions, locating information, interpreting flow charts, reading technical manuals, understanding engineering documents, analyzing charts and graphs)

6.   **Work ethics**

7.   **Others:**
     Computer skills
     Drafting
     Continuous quality improvement principles

     Kathy Webster, Boeing Work Skills Associate; *Beyond ABCs*; **1994.**

HOW THE 6+1 TRAIT® MODEL STACKS UP

The 6+1 Trait® Writing Model of Instruction & Assessment fares well, when compared to a new (2007) and widely heralded report on effective writing strategies. *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools,* commissioned by the Carnegie Corporation, identified 11 classroom practices that work.

Of these 11, the 6+1 Trait® Model specifically aligns as follows:		
1	Writing Strategies	Teaches students strategies for planning, revising, and editing their compositions
2	Summarization	Involves explicitly and systematically teaching students how to summarize texts
3	Collaborative Writing	Encourages collaboration in planning, drafting, revising, and editing work
4	Specific Product Goals	Assigns specific goals for writing and then, using trait rubrics, helps students routinely self-assess
5	Word Processing	Encourages the use of appropriate technology to support students in the development of compositions and support for writing assignments
6	Sentence Combining	Teaches students to understand and construct more complex, sophisticated sentences by sentence combining, rearranging, expanding, and imitating strategies
7	Prewriting	Encourages students to generate, gather and organize ideas for their compositions
8	Inquiry Activities	Engages students in analyzing immediate, concrete data to help them develop ideas and content for their compositions
9	Process Writing approach	Interweaves many writing process instructional activities in a workshop environment providing for extended writing opportunities, writing for authentic audiences, personalized instruction, and cycles of writing. This includes a visual showing how the 6+1 Trait® model works with the writing process
10	Study of Models	Provides students with opportunities to read, analyze, and emulate models of good writing
11	Writing for Content	Uses writing as a tool for learning content material

	Learning	

WRITING FINDINGS 3

Highlights of Research on the Teaching of Writing

The effectiveness of six methods of teaching writing varies widely.

Grammar. The study of traditional school grammar (i.e., the definition of parts of speech, the parsing of sentences, etc.) has no effect on raising the quality of student writing. Every other focus of instruction examined in this review is stronger. Moreover, a heavy emphasis on mechanics and usage (e.g., marking every error) results in significant losses in overall quality.

Models. The presentation of good pieces of writing as models is significantly more useful than the study of grammar. At the same time, treatments that use the study of models almost exclusively are considerably less effective than other available techniques.

Sentence combining. The practice of building complex sentences from simpler ones has been shown to be effective in a large number of experimental studies. This research shows sentence combining, on the average, to be more than twice as effective as free writing as a means of enhancing the quality of student writing.

Scales. Scales, criteria, and specific questions that students apply to their own or others' writing have a powerful effect on enhancing quality. Through using the criteria systematically, students appear to internalize them and bring them to bear in generating new material even when they do not have the criteria in front of them.

Inquiry. Inquiry focuses students' attention on strategies for transforming raw data. For example, students might find and state specific details that convey personal experience vividly, examine sets of data to develop and support explanatory generalizations, or analyze situations that present ethical problems and develop arguments about those situation. On the average these treatments are three-and-a-half times more effective than free writing and over two-and-a-half times more effective than the traditional study of model pieces of writing.

Free writing. This focus asks student to write freely about whatever concerns them. As a major instruction technique, free writing is more effective than teaching grammar in raising the quality of student writing. However, it is less effective than other focuses of instruction examined.

While the results for the various treatments differ greatly from each other, they all have some place in the writing curriculum. Indeed, sentence combining, scales, and inquiry all make occasional use of models, but they certainly do not empathize the study of models exclusively. Structured free writing, in which writers jot down all of their ideas on a particular topic, can be successfully integrated with other techniques as a means of both memory search and invention.

<div align="right">George Hillocks, Jr.</div>

Do Writing Criteria Help Students to Write Better?

Scales, criteria, and specific questions--which students apply to their own or others' writing--also have a powerful effect on enhancing quality. Through using the criteria systematically, students appear to internalize them and bring them to bear in generating new material even when they do not have the criteria in front of them. These treatments are two times more effective than free writing techniques. George Hillocks, Jr. - *Research on Written Composition*, 1986

Fractions of Standard Deviations
Focus of Instruction Experimental/Control Effects
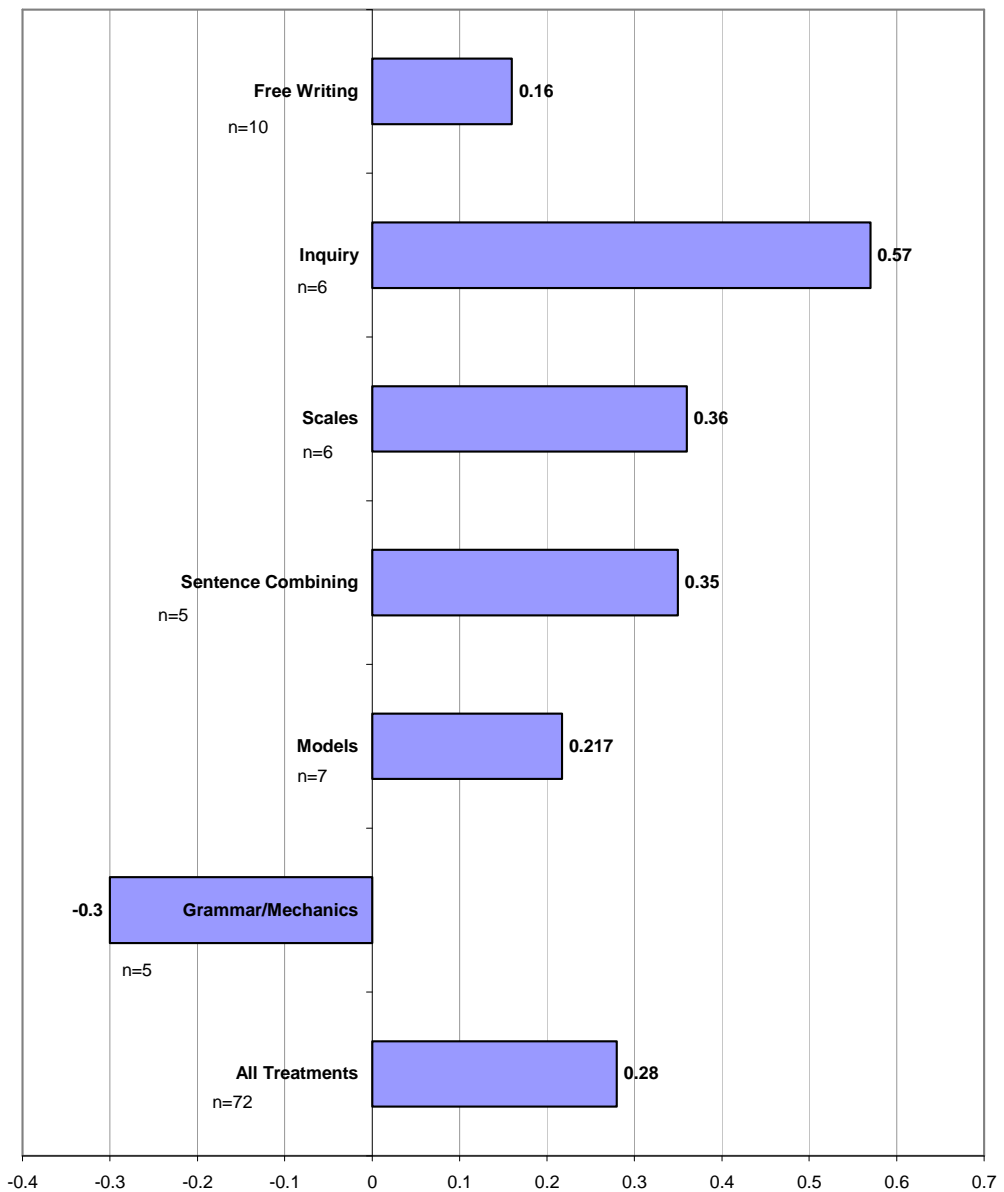
	All Treatments	Grammar/Mechanics	Models	Sentence Combining	Scales	Inquiry	Free Writing
Series1	0.28	-0.3	0.217	0.35	0.36	0.57	0.16