

The National Writing Project

CLIENT SATISFACTION AND PROGRAM IMPACT

Results from a Satisfaction Survey and Follow-
up Survey of Participants at 2003 Invitational
Institutes

*Kathleen Dickey
Judy Hirabayashi
Allison Murray
Mark St. John
Laura Stokes*

With the assistance of
Laurie Senauke

December 2004

INVERNESS RESEARCH ASSOCIATES

TABLE OF CONTENTS

SUMMARY	1
I. INTRODUCTION	2
II. RESULTS OF CLIENT SATISFACTION SURVEY	3
III. RESULTS OF FOLLOW-UP SURVEY OF IMPACT OF SUMMER INSTITUTES ON CLASSROOM PRACTICE	4
A. The Overall Value of NWP Summer Institutes for Teachers	5
B. Influences of NWP Institutes on Teachers' Use of Specific Classroom Practices	7
C. Influences of NWP Institutes on Teachers' Assessment of Student Writing .	10
D. Inferred Benefits to Participants' Students Because of NWP Institutes	11
IV. NWP IMPACT ON CLASSROOM PRACTICES ASSOCIATED WITH HIGHER STUDENT ACHIEVEMENT IN WRITING.	15
V. CONCLUSION	30

The National Writing Project

CLIENT SATISFACTION AND PROGRAM IMPACT

Results from a Satisfaction Survey and Follow-up Survey of Participants at 2003 Invitational Institutes

SUMMARY

Teachers who participated in invitational institutes of the National Writing Project (NWP) during summer 2003 responded to two surveys: a Client Satisfaction Survey immediately following the institutes, and a Follow-up Survey of Program Impact one year later. The two surveys together assess the quality and usefulness of the institutes for participants, the knowledge and skills those participants gained, changes they made in their classroom practice as a result of the institutes, and the benefits they believe their students are gaining.

The results indicate that NWP institutes promote teacher learning and lead to increased use of effective classroom practices:

- ◆ More than 97% of participants in the NWP's Summer 2003 invitational institutes gave positive assessments of the value and usefulness of the NWP programs. Teachers reported benefiting in multiple ways from the institutes.
- ◆ A substantial majority of NWP participants report that in the year following the institutes, they increased their use of multiple teaching practices that support students' writing development within a classroom community of writers. As a result of the summer institutes, teachers more often discuss students' writing with them, put greater emphasis on having students write to learn, focus more on developing their students' skill in choosing topics and in addressing different audiences and purposes, and give their students more practice in planning and revising their writing.
- ◆ The great majority of NWP institute participants (98.0%) think their students benefit from what they have gained from the Writing Project. Moreover, NWP participants believe that what they as teachers gain from the institutes ultimately benefits their students in all areas of the curriculum, not just in the writing classroom *per se*.
- ◆ At all grade levels, a majority of NWP participants employ classroom practices that are statistically correlated with higher achievement levels on the 2002 NAEP Writing Assessment in grades 4, 8, and 12. Further, as a result of the NWP, most NWP institute participants (97.5%) report that they are changing their classroom practices toward effective use of these practices.

I. INTRODUCTION

This report presents results of a study completed in fall 2004 by Inverness Research Associates on behalf of the National Writing Project (NWP). The study was designed to satisfy a U.S. Department of Education (USDOE) requirement that programs assess participants' satisfaction with their professional development experiences, and also assess the impact of professional development programs on participants' subsequent classroom practices.

Participants in the study were teachers attending summer 2003 Invitational Institutes held at 169¹ sites of the NWP. These institutes are the core programs by which each NWP site works with teachers (K-college) who will serve as the "teacher-consultants" providing leadership for the site and extensive professional development service to the schools and districts within the local regions of each. NWP teacher-consultants coordinate and deliver professional development activities in schools throughout the year.

Inverness Research Associates administered two surveys to these participants. The first was a Client Satisfaction Survey collected at the end of the summer institutes in 2003. This survey asks participants to rate the quality and potential value of the institute for their teaching. 2,799 (of a total 3,214 participants) responded to this survey. 2003 was the fifth consecutive year that we administered this instrument. Below we report results from all six² years (1999-2004) that we administered it in order to show trends in participant responses. Participants' ratings are consistent--and consistently high--from year to year, which gives us considerable confidence in the validity and robustness of the results.

For the second survey, the Follow-up Survey, we asked summer 2003 participants one year later (Spring 2004) to assess the impact of the summer 2003 institute on their classroom teaching practices. 1,097 participants responded to the follow-up survey. 2004 was the fifth year that this instrument was administered. The survey has three sections, two of which include exactly the same items as in prior years. For these sections, this year's results are quite similar to prior years' results, and this gives us confidence in their robustness. We updated the third section of the survey so that its items coincide with the most recent NAEP assessment in 2002.

Immediately below, we present the Client Satisfaction Survey results for the 2003 group, along with the results for all other years for which we have the same information (i.e., 1999-2002, and 2004). Following this brief section, the report focuses on the results of the Follow-up Survey for participants in 2003 summer institutes.

¹ Of the 173 NWP sites in 2003, 169 submitted Client Satisfaction Survey data.

² We include results of the summer 2004 Satisfaction Survey. The 2004 participants will be given the Follow-Up Survey in spring 2005.

II. RESULTS OF CLIENT SATISFACTION SURVEY

The “target indicator” of client satisfaction established by the USDOE is 75%. Each year that we have administered this survey, participant ratings have far exceeded this target. Across all questions, at least 95% of teachers gave positive assessments of the value and usefulness of these programs. Results for the past six years are shown below.

TABLE 1.
Results of Client Satisfaction Survey:
Summer Institutes 1999 - 2004

	2004		2003 ³		2002		2001		2000		1999	
	# partic	% Excellent	# partic	% Excellent	# partic	% Excellent	# partic	% Excellent	# partic	% Excellent	# partic	% Excellent
1. How would you rate the overall quality of this NWP institute?	2,831	99.1%	2,789	99.3%	2,731	98.4%	2,616	98.4%	2,672	97.9%	2,168	97.7%
	# partic	% Better	# partic	% Better	# partic	% Better	# partic	% Better	# partic	% Better	# partic	% Better
2. On average, how would you compare the quality and value of this institute to other (non-NWP) professional development activities you have participated in recently?	2,758	97.4%	2,600	97.9%	2,483	96.1%	2,406	96.0%	2,449	94.9%	1,980	95.5%
	# partic	% A great deal	# partic	% A great deal	# partic	% A great deal	# partic	% A great deal	# partic	% A great deal	# partic	% A great deal
3. How much has the institute contributed to your understanding of how to teach writing effectively?	2,831	97.3%	2,790	98.1%	2,734	95.8%	2,614	96.6%	2,674	95.1%	2,168	95.0%
4. To what degree do you feel that you will be able to use and apply what you have learned in this institute to your own classroom and your own students?	2,832	97.7%	2,789	97.5%	2,736	96.5%	2,614	96.8%	2,677	95.3%	2,167	94.9%
5. To what degree do you believe that the experience you have had in this institute will translate into improved writing skills for your students?	2,831	97.6%	2,784	98.0%	2,730	96.1%	2,613	97.1%	2,669	94.9%	2,165	95.3%

Percentage totals for each question represent participants who gave ratings of “4” or “5” on five-point scales where “1” represents a very negative rating, “3” is a neutral rating, and “5” indicates a very positive rating.

³ These figures are referenced in this report.
 INVERNESS RESEARCH ASSOCIATES

III. RESULTS OF FOLLOW-UP SURVEY OF IMPACT OF SUMMER INSTITUTES ON CLASSROOM PRACTICE

In Spring 2004, Inverness Research Associates conducted a follow-up survey to determine the impact of the summer 2003 institute one year later. This survey examined four areas:

- **The Overall Value of NWP Summer Institutes for Teachers**
- **Influences of NWP Institutes on Teachers' Use of Specific Classroom Practices**
- **Influences of NWP Institutes on Teachers' Assessment of Student Writing**
- **Inferred Benefits to Participants' Students Because of NWP Institutes**

Response rate

Of the 3,214 participants at the 2003 Summer Institute, 2,799 completed Satisfaction Surveys. Of those respondents, 2,647 provided email addresses. We contacted this group by email in May 2004 and provided a direct link to our online follow-up survey. We received a total of 1,097 Follow-up Surveys, for an overall response rate of 39%. Respondents represented 169 sites. Due to the distribution of respondents, we have no reason to believe the results reported are atypical or unrepresentative of the total population of NWP participants.

TABLE 2.
Response Rate on the Spring 2004 Follow-up Survey

Grade level taught	N of responses	N of emails sent	Response rate	% of all responses
K - 2	149	NA*	NA*	13.6%
3 - 5	263	NA*	NA*	24.0%
Elementary School Total	412	1001	41%	37.6%
6 - 8	273	657	42%	24.9%
9 - 12	339	763	44%	30.9%
Middle and High School Total	612	1420	43%	55.8%
<u>Post 12</u>	73	129	57%	6.7%
<i>Unknown or Other GL**</i>		249		
Total -- All Grades	1,097	2,799	39%	100%

* A total of 1001 emails were sent to K-5 level teacher participants; further grade level breakdown is unknown.

** These participants did not report a grade level on the Summer Institute surveys, or their teaching did not fit within the K-5, 6-8, 9-12, or College categories.

Below we present results for each of the four sections of the survey. For each section, we first present results across all grades, K-college, and then we present results by grade level.

A. The Overall Value of NWP Summer Institutes for Teachers

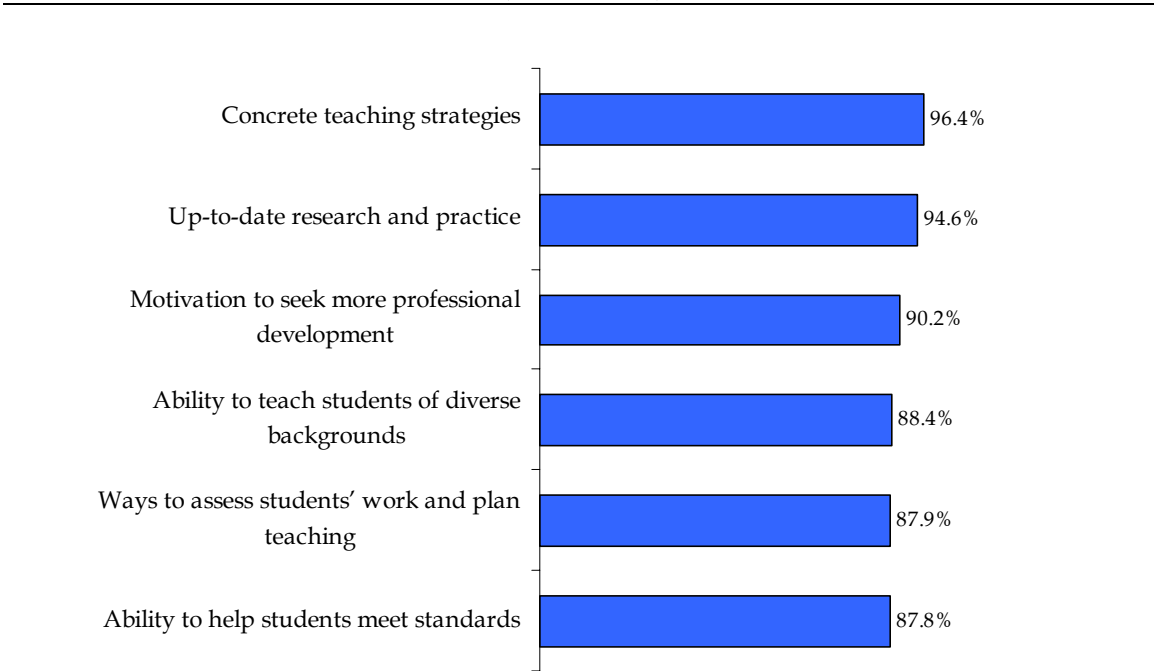
In a set of six questions on the survey, we asked teachers to assess the extent to which they gained a variety of benefits from the institutes. Results below are for all questions.

Results for all grades

- ◆ **In very high proportions, teachers reported that they are benefiting in multiple ways from the summer institutes. Teachers’ ratings suggest that the NWP supports research-based practice and fosters ongoing teacher learning and improvement. Further, NWP institutes are helping teachers to be more responsive both to their students and to standards.**

Ninety-six percent of the teachers said they gained concrete teaching strategies from the institute; 95% said the institute brought them more up-to-date on the latest research and practice, and 90% said the experience caused them to seek further professional training. Further, 88% said the institute has enabled them to teach students with a wider range of backgrounds and skill levels; 88% of the teachers said they are better able to assess students effectively because of the institute; and 88% say they are better able to help students reach standards.

**FIGURE 1.
Benefits of Summer Institutes for Teachers
(All Grades)**



Percentages represent teachers who marked 4 or 5 on a 5-point scale where 1 = "disagree strongly" and 5 = "agree strongly."

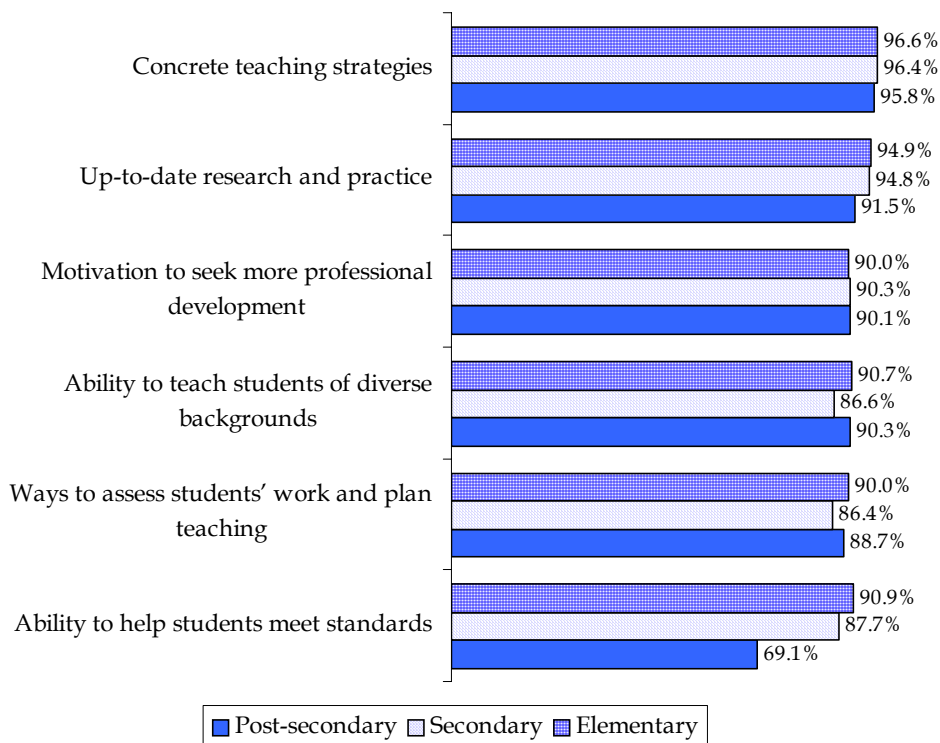
Grade level comparisons

- ◆ **In general, teachers at all levels reported very similar benefits.⁴ For the past five years that we have conducted this study, we have observed that the NWP institutes have similar benefits for all teachers, whether their students are five years old or are young adults.**

This finding has educational significance because of the still quite common assumption that teachers from multiple grade levels (even primary with upper elementary, or middle with secondary) prefer not to be combined for professional development. However, teachers at all grade levels, K-16, attend the NWP summer institutes together. This finding underscores the NWP tenet that teachers of all grade levels can share responsibility for supporting students’ writing development, and underscores as well the power of the NWP model that can benefit such a wide range of teachers.

We cannot account statistically for the difference in responses between participants from K-12 schools and those from colleges and universities for “help students meet standards.” Some of the difference may be due to the relative scarcity of standards policies as a common reference point in higher education.

FIGURE 2.
Benefits to Teachers
(Comparisons by Grade Levels Taught)



Percentages represent teachers who marked 4 or 5 on a 5-point scale where 1 = “disagree strongly” and 5 = “agree strongly.”

⁴ 73 out of 129 post-secondary teachers responded to the follow-up survey, yielding a response rate of 57% for this population. However, for statistical representation, a response rate of 75% would have been required because of the relatively small size of this group.

B. Influences of NWP Institutes on Teachers' Use of Specific Classroom Practices

We asked teachers how much, if at all, they had increased their use of a range of teaching practices as a result of their Writing Project involvement.

Summary results for all grades

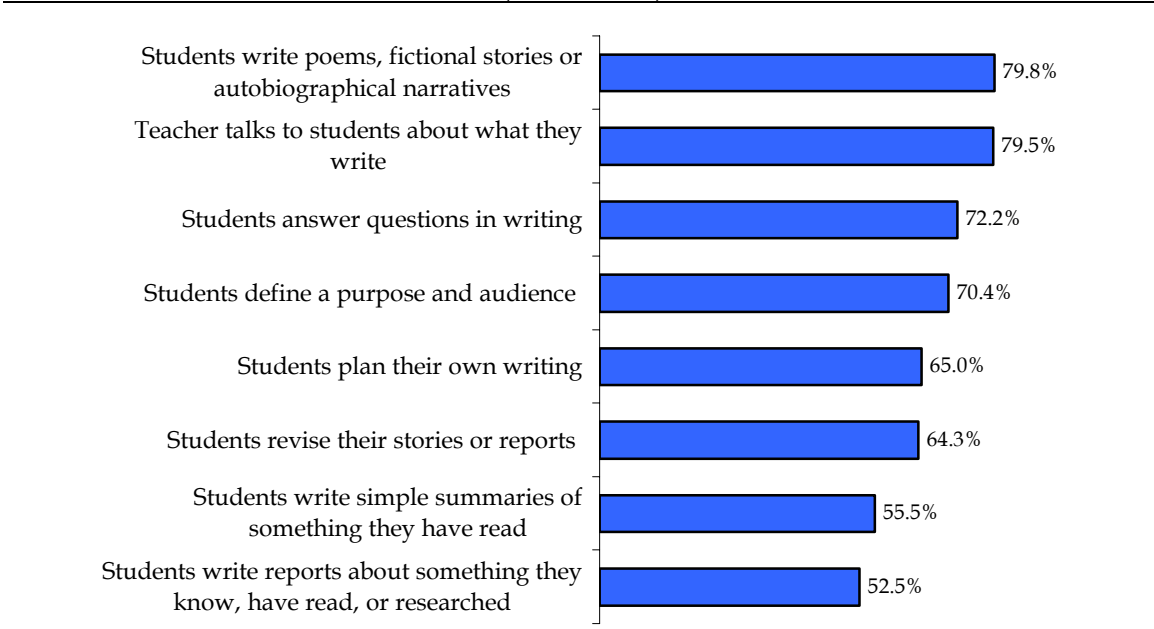
- ◆ **The majority of participants report that they use classroom practices that enable their students to master a wide range of genres important to versatility in writing. For example, as a result of Writing Project institutes, more teachers have their students write narrative pieces (including poems, fictional stories, and autobiographies), as well as summaries or informative reports about something they know, have read, or researched.**
- ◆ **The majority of participants report that they have increased their use of multiple teaching practices that teach students the processes of writing and support students' development within a classroom community of writers. For example, teachers more often discuss their students' writing with them, develop their students' skill in addressing different audiences and purposes, and give students practice in planning and revising their writing.**

More than three-quarters of participants (80%) report that, because of the Writing Project institute, they more frequently give their students the opportunity to write for narrative purposes, and more than half encourage writing for informative purposes through writing simple summaries (56%) or informative reports (53%).

Over three-quarters of the WP participants (80%) talk to their students about their writing more often because of their participation in the NWP, and 70% help students define audiences and purposes for their writing. Nearly two-thirds of participants (65%) more often ask students to plan their writing before they write, and have them make changes to their stories or reports to fix mistakes and improve them. All of these practices support students' development of writing skills and dispositions within an active community of writers. Additionally, almost three-fourths of teachers (72%) more often ask their students to answer questions in writing, a practice that supports the uses of writing to think and learn in all subjects. The following graph displays these results.⁵

⁵ For the other four practices we asked about, fewer than half of the participants report that they have changed their practices as a result of participation in the NWP. 49.9% more often have their students write long answers to test questions involving reading, 41.7% have their students write persuasive letters more often, 27.1% more often have students use computers to make changes to their reports, and 25.3% ask their students to look for information on the Internet more often. Results for all 12 practices are detailed in Section IV.

FIGURE 3.
Classroom Practices that Teachers Use More Often Because of the Summer Institute
(All Grades)



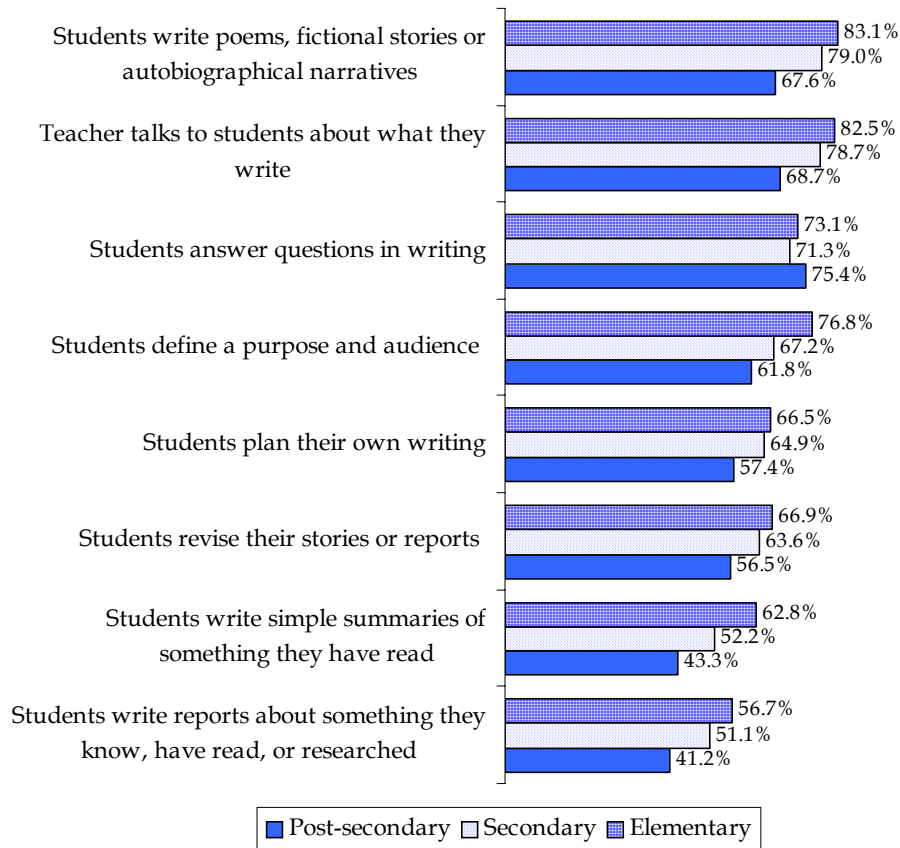
Percentages represent teachers who indicate that they engage in this practice "more often" this year because of the Writing Project.

Grade level comparisons

- ◆ **As a result of the Writing Project, at least half to over four-fifths of WP participants who teach in elementary and secondary schools have increased their use of classroom practices that promote the development of student writing. The percentages of teachers who have said that their practices have changed are similar for both elementary and secondary level teachers. Overall, K-12 teachers are somewhat more likely to have changed their teaching practices than post-secondary teachers; nonetheless, the Writing Project has influenced the practices of college level educators as well.**

The graph below displays these results.

FIGURE 4.
Classroom Practices that Teachers Use More Often because of the Summer Institute
(Comparisons by Grade Levels Taught)



Percentages represent teachers who indicate that they engage in this practice "more often" this year because of the Writing Project.

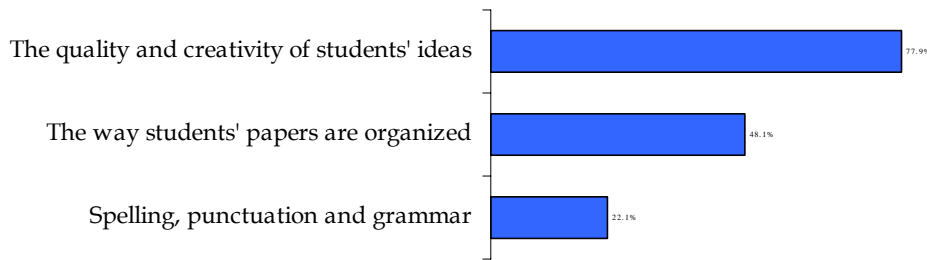
C. Influences of NWP Institutes on Teachers’ Assessment of Student Writing

We asked teachers to report on factors they take into account when they assess student writing. Results below are for all three survey items.

Results for all grades

- ◆ As a result of the Writing Project, more than three-quarters (78%) of all participants place more emphasis on the quality and creativity of students’ ideas when they assess their students’ papers; almost half (48%) said their emphasis is greater regarding the organization of students’ papers; and almost one quarter (22%) said they place more emphasis on the mechanics of writing (spelling, punctuation, and grammar) as a result of the WP.

FIGURE 5.
Assessment Factors that Teachers Emphasize More Because of the Summer Institute (All Grades)

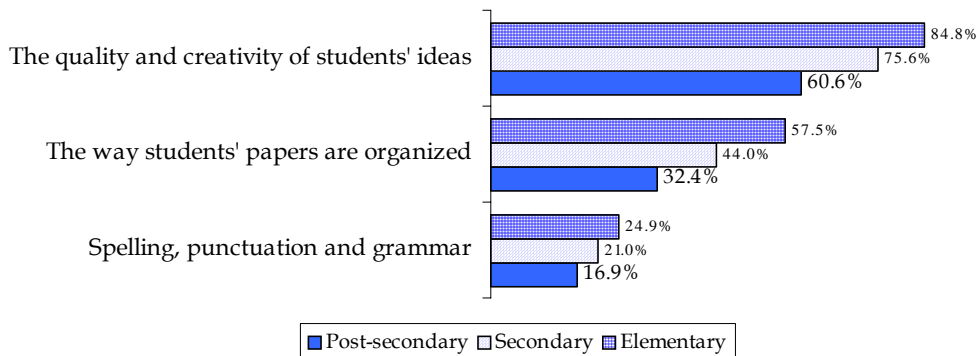


Percentages represent teachers who indicate that their emphasis has increased this year because of the Writing Project.

Grade level comparisons

- ◆ As a result of the Writing Project, teachers at all grade levels have increased their emphasis on specific areas of writing assessment. However, more elementary teachers have changed their emphases than have teachers at the secondary and college levels.

FIGURE 6.
Assessment Factors that Teachers Emphasize More Because of the Summer Institute (Comparisons by Grade Levels Taught)



Percentages represent teachers who indicate that their emphasis has increased this year because of the Writing Project.

D. Inferred Benefits to Participants’ Students Because of NWP Institutes

We asked teachers to assess the extent to which what they learned in the Writing Project ultimately benefits their students. Results shown below are for all six items.

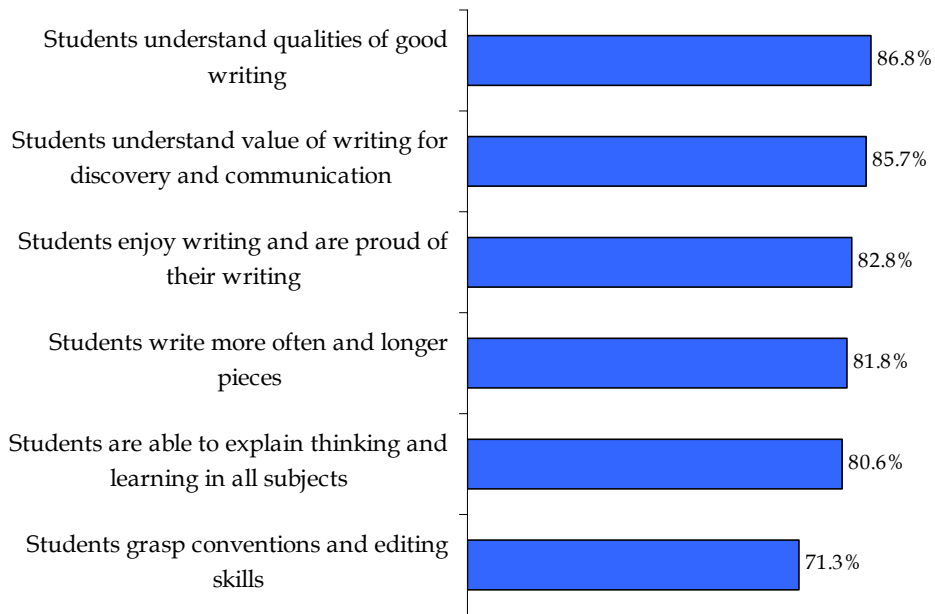
Results for all grades

- ◆ **The great majority of Institute participants think that their students are benefiting from what they, as teachers, have gained from the Writing Project. Moreover, teachers believe that the benefits to students extend beyond the writing classroom to all areas of the curriculum.**

Across all grade spans, teachers report that, because of their participation in the Writing Project, their students better understand the qualities of good writing (87%); better understand the value of writing for both discovery and communication (86%); enjoy writing more and are more proud of what they write (83%); and write more often and write longer pieces (82%).

Moreover, 81% of the teachers report that their students are better able to explain their thinking through writing in all subjects; and 71% report that their students have better editing skills and a better grasp of the conventions of correctness. The graph below displays these results.

FIGURE 7.
Benefits of Writing Project Involvement for Participants’ Students
(All Grades)



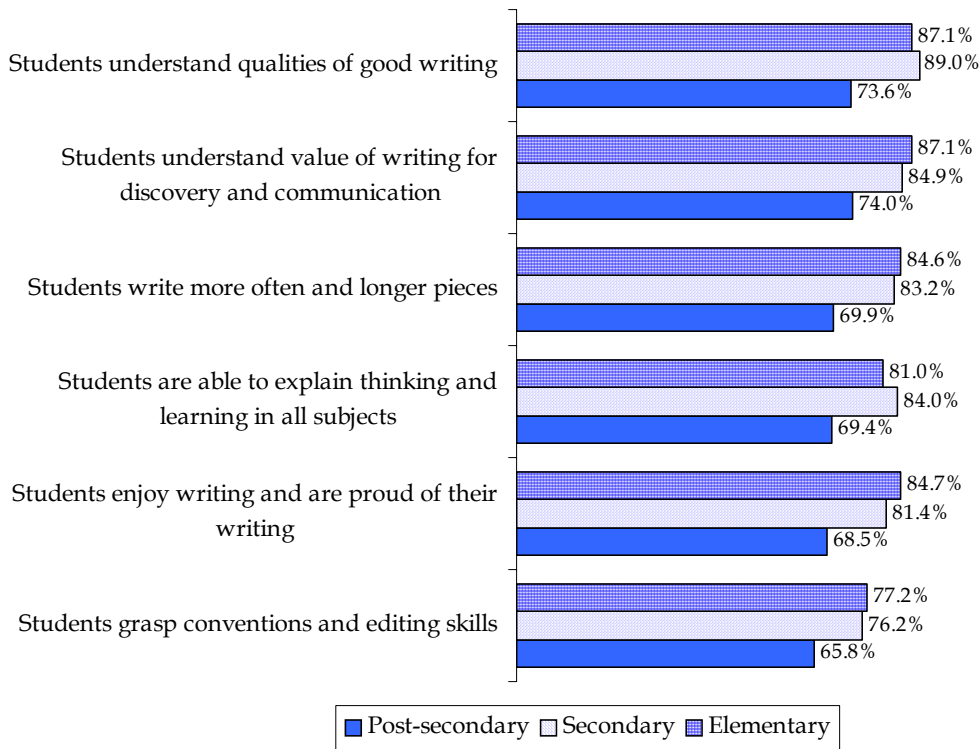
Percentages represent teachers who marked 4 or 5 on a 5-point scale where 1 = “disagree strongly” and 5 = “agree strongly.”

Grade level comparisons

- ◆ There is very little difference between elementary and secondary teachers’ perspectives on benefits to their students. Across the board, roughly 12-15% more elementary and secondary teachers report benefits to student than their post-secondary colleagues; nonetheless, a substantial majority of post-secondary teachers believe their students benefit.

The following graph shows these results.

FIGURE 8.
Benefits of Writing Project Involvement for Participants’ Students
(Comparisons by Grade Levels Taught)



Percentages represent teachers who marked 4 or 5 on a 5-point scale where 1 = “disagree strongly” and 5 = “agree strongly.”

IV. NWP IMPACT ON CLASSROOM PRACTICES ASSOCIATED WITH HIGHER STUDENT ACHIEVEMENT IN WRITING

This section reports findings related to the frequency with which NWP teachers in the elementary, middle, and high school grades use selected classroom practices identified on student and teacher questionnaires conducted as part of the National Assessment of Educational Progress (NAEP) writing test. These practices, when used in the right frequency, were statistically correlated with higher achievement levels on the grades 4, 8, and 12 writing test. The section also reports the impact of the NWP institutes on teachers' use of these practices.

To identify these practices, Inverness Research used the NAEP data website, which allows item-by-item analysis of questions asked on the teacher and student questionnaires in 1998 and 2002 (<http://nces.ed.gov/nationsreportcard/naepdata>). NAEP items were considered for inclusion on the NWP follow-up survey if they met two criteria: 1) they have a direct relationship to writing instruction (we omitted practices relating exclusively to reading instruction) and 2) there is a statistically significant correlation between responses on the questionnaire and student performance on the 2002 writing assessment.

NWP staff selected the final set of 15 items from the lengthy list that we derived from the NAEP website. Fourteen were from the recommended group, and the other was an item that did not show a statistically significant correlation with student performance, but had high relevance to NWP goals. Thirteen questions were taken from the NAEP student questionnaires, while the other two were asked only on the NAEP teacher questionnaire (which is administered at grades 4 and 8, but not grade 12).

The fifteen classroom practices are listed below in the order in which they appear in our analysis of findings.

Practices related to writing curriculum – genre

1. Students write a poem, fictional story or autobiographical narrative.
2. Students write a simple summary of something they have read.
3. Students write reports about something they know, have read, or researched.
4. Students write letters that convince or persuade.

Practices related to writing curriculum – composing processes

5. Teachers talk to students about their writing.
6. Teachers have students plan their writing.
7. Students make changes to their stories, papers, or reports.
8. Teacher has students define a purpose and an audience when they write.

Practices related to uses of writing to learn in all subjects

9. Students write long answers to questions on tests or assignments that involve reading.
10. Students answer questions in writing.

Practices related to uses of technology in writing

11. Students look for information on the Internet to include in their stories, papers, or reports.
12. Students use a computer to make changes to their stories, papers, or reports.

Practices related to assessment of writing

13. When assessing student writing, teachers emphasize the quality and creativity of students' ideas.
14. When assessing student writing, teachers emphasize the way the students' papers are organized.
15. When assessing student writing, teachers emphasize spelling, punctuation, and grammar.

Results for all grade levels

On the whole, the results indicate that NWP institutes promote classroom practices that contribute to higher achievement and foster positive change in teachers' use of those practices:

- ◆ **At elementary, middle, and high school grade levels, a majority of NWP participants employ 13 of the 14 classroom practices at frequencies that are correlated with higher achievement on the NAEP writing test⁶. The other classroom practice is employed at frequencies that are correlated with higher achievement on the NAEP writing test by a majority of participants at the high school level only.**
- ◆ **As a result of the NWP, a majority of teachers at all grade levels are changing their classroom practices in the direction of optimal frequency of use for 7 of these practices. A majority of participants at one or two grade level spans are changing three other classroom practices in a desirable direction.**

⁶ For brevity's sake we define the frequencies of use that are correlated with higher achievement on NAEP as "optimal" frequencies in the discussion.

Item-by-item results for all grade levels

In the left-hand column of the table that appears below and on the following pages, we summarize the NAEP findings on optimal frequencies for each of the fifteen classroom practices. In the three right-hand columns, we report how frequently NWP teachers use each practice, and the impact of the NWP institutes on these practices.

**TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement**

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
1. Students write a poem, fictional story or autobiographical narrative.			
At all grade levels, students who wrote a poem, fictional story, or an autobiographical narrative at least a few times a year scored higher than students who never or hardly ever did.	99% of NWP teachers have had students write a poem, fictional story, or autobiographical narrative a few times a year or more often. 40% give their students these experiences once or twice a month, the optimal frequency.	98% of NWP teachers say they have had students write a poem, fictional story, or autobiographical narrative at least a few times a year.	96% of NWP teachers say they have had students write a poem, fictional story, or autobiographical narrative at least a few times a year.
In 4 th grade, students who wrote a fictional story or poem once or twice a month scored highest.	84% of participants say they do this more frequently as a result of the Writing Project.	79% of participants say they do this more frequently as a result of the Writing Project.	79% of participants say they do this more frequently as a result of the Writing Project.

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
2. Students write a simple summary of something they have read.	This question was not asked at the 4 th grade level.	A total of 94% of NWP teachers say they have had students write a simple summary of something they have read at least a few times a year. 31% of NWP teachers say they have students write a simple summary of something they have read once or twice a month, the optimal level.	A total of 92% of NWP teachers say they have had students write a simple summary of something they have read at least a few times a year.
This question was not asked at the 4 th grade level.		55% of participants say they do this more frequently as a result of the Writing Project.	50% of participants say they do this more frequently as a result of the Writing Project.

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
3. Students write reports about something they know, have read, or researched.			
At every grade level tested, students who wrote reports at least a few times a year, and up to once or twice a month, about something they know, have read, or researched, scored higher on the NAEP writing test than those who did not write reports.	84% of NWP teachers say they have assigned students to write a report about something they knew, had read, or researched at least a few times a year, and up to once or twice a month.	84% of NWP teachers say they have assigned students to write a report about something they knew, had read, or researched at least a few times a year and as often as once or twice a month. An additional 10% of NWP teachers have students write such reports once a week.	87% of NWP teachers say they have assigned students to write a report about something they knew, had read, or researched at least a few times a year and as often as once or twice a month. An additional 9% of NWP teachers have students write such reports once a week.
At the 8 th and 12 th grade levels, students who wrote such reports at least once a week also scored higher than those who never did.	58% of participants say they do this more frequently as a result of the Writing Project.	51% of participants say they do this more frequently as a result of the Writing Project.	51% of participants say they do this more frequently as a result of the Writing Project.

**TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement**

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
4. Students write letters that convince or persuade.			
At 4th grade , students who wrote letters at least a few times a year and up to once or twice a month with the intent to convince or persuade scored higher on the NAEP writing test than those who never wrote persuasive letters or who wrote them weekly.	83% of NWP teachers have asked their students to write a convincing or persuasive letter at least a few times a year, or once or twice a month.	89% of NWP teachers have asked their students to write a convincing or persuasive letter at least a few times a year, and up to weekly.	83% of NWP teachers have asked their students to write a convincing or persuasive letter at least a few times a year, and up to weekly.
At 8 th grade and 12 th grade, students who wrote such letters at least a few times a year, and up to weekly scored higher than students who never did.	51% of NWP participants do this more frequently as a result of their participation in the NWP institute.	38% of NWP participants do this more frequently as a result of their participation in the NWP institute.	41% of NWP participants do this more frequently as a result of their participation in the NWP institute.

**TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement**

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
5. Teachers talk to students about their writing.			
At all grade levels, students whose teachers always or sometimes talked with them about their writing scored higher than those students whose teachers never talked with them about their writing.	87% of NWP teachers say they almost always talk to their students about their writing; an additional 13% say they sometimes do this.	81% of NWP teachers say they almost always talk to their students about their writing, the optimal frequency for this practice; nearly all the rest (18%) sometimes talk to their students about their writing.	83% of NWP teachers say they almost always talk to their students about their writing; an additional 16% say they sometimes do this.
8 th grade students whose teachers always talked to them about their writing scored higher than those whose teachers never or only sometimes did.	81% say they do this more frequently than before because of the Writing Project.	77% say they do this more frequently than before because of the Writing Project.	82% say they do this more frequently than before because of the Writing Project.

**TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement**

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
6. Teachers have students plan their writing.			
At both 4 th and 8 th grade levels, students whose teachers often had them plan their writing scored significantly higher than those students who were never or only sometimes involved in planning. ⁷	81% of NWP teachers say they almost always have their students plan their writing.	78% of NWP teachers say they almost always have their students plan their writing.	This question was not asked at the 12 th grade level.
This question was not asked at the 12 th grade level.	64% of participants say they do this more frequently as a result of the Writing Project.	65% of participants say they do this more frequently as a result of the Writing Project.	

⁷ The NAEP response for this question was teacher reported and the scale was different than ours. We used a “never or hardly ever”, “sometimes”, “almost always” scale – the NAEP scale was “never”, “rarely”, “sometimes”, “often”. We aligned NAEP’s “never” and “rarely” with our “never/hardly ever” and NAEP’s “often” with our “almost always”.

**TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement**

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
7. Students make changes to their stories, papers, or reports.			
At all grade levels, students who almost always made changes scored higher than those who never or only sometimes engaged in this practice. Students who never or hardly ever made changes scored lowest of all.	82% of NWP teachers say they almost always have their students make changes to their stories or reports to fix mistakes and improve them; an additional 17% say they sometimes do this.	79% of NWP teachers say they almost always have their students make changes to their stories or reports to fix mistakes and improve them; an additional 20% say they sometimes do this.	72% of NWP teachers say they almost always have their students make changes to their stories or reports to fix mistakes and improve them; an additional 25% say they sometimes do this.
	70% of participants say they do this more frequently as a result of the Writing Project.	63% of participants say they do this more frequently as a result of the Writing Project.	64% of participants say they do this more frequently as a result of the Writing Project.

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
8. Teacher has students define a purpose and an audience when they write.			
At both 4 th and 8 th grade levels, students whose teachers often asked them to define a purpose and an audience for their writing had higher scores than those who were rarely or only sometimes asked. ⁸	53% of NWP teachers report that they almost always ask students to define a purpose and audience when they write about something; an additional 43% say they sometimes do this.	62% of NWP teachers report that they almost always ask students to define a purpose and audience when they write about something; an additional 35% say they sometimes do this.	This question was not asked at the 12 th grade level.
This question was not asked at the 12 th grade level.	79% of participants say they do this more frequently as a result of the Writing Project.	72% of participants say they do this more frequently as a result of the Writing Project.	

⁸ The NAEP response for this question was teacher reported and the scale was different than ours. We used a “never or hardly ever”, “sometimes”, “almost always” scale – the NAEP scale was “never”, “rarely”, “sometimes”, “often”. We aligned NAEP’s “never” and “rarely” with our “never/hardly ever” and NAEPs “often” with our “almost always”.

**TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement**

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
9. Students write long answers to questions on tests or assignments that involve reading.			
At all grade levels, students who wrote long answers at least one or two times a year scored higher than those who never or hardly ever did.	88% of NWP teachers say they have had students write long answers to questions on tests or assignments that involved reading at least a few times a year or more often; 33% say they do this once or twice a month, the optimal frequency.	93% of NWP teachers say they have had students write long answers to questions on tests or assignments that involved reading at least a few times a year or more often; 45% say they do this once or twice a month, the optimal frequency.	97% of NWP teachers say they have had students write long answers to questions on tests or assignments that involved reading at least a few times a year or more often.
At the 4 th and 8 th grade levels, students who wrote long answers once or twice a month scored highest of all.	52% of participants say they do this more frequently as a result of the Writing Project.	53% of participants say they do this more frequently as a result of the Writing Project.	54% of participants say they do this more frequently as a result of the Writing Project.

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
10. Students answer questions in writing.			
NAEP’s significance table does not show significant differences for this item. However, the NWP elected to include this practice because it is central to other practices supported by the NWP that involve writing in all curriculum areas.	<p>83% of NWP teachers say they have asked students to answer questions in writing at least once a week; an additional 13% say they do this at least once or twice a month.</p> <p>753% of participants say they do this more frequently as a result of the Writing Project.</p>	<p>87% of NWP teachers say they have asked students to answer questions in writing at least once a week; an additional 9% say they do this at least once or twice a month.</p> <p>67% of participants say they do this more frequently as a result of the Writing Project.</p>	<p>89% of NWP teachers say they have asked students to answer questions in writing at least once a week; an additional 9% say they do this at least once or twice a month.</p> <p>75% of participants say they do this more frequently as a result of the Writing Project.</p>

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
11. Students look for information on the Internet to include in their stories, papers, or reports.			
At all grade levels, students who sometimes or almost always use the Internet for research scored higher than students who don't.	90% of NWP teachers say they sometimes or almost always ask students to look for information on the Internet to include in their stories or reports.	87% of NWP teachers say they sometimes or almost always ask students to look for information on the Internet to include in their stories or reports; of these, 25% report that they almost always do this.	93% of NWP teachers say they sometimes or almost always ask students to look for information on the Internet to include in their stories or reports; of these, 30% report that they almost always do this.
Moreover, 8 th and 12 th graders who almost always use the Internet for research score higher than their peers who only sometimes use it.	29% of participants say they do this more frequently as a result of the Writing Project.	23% of participants say they do this more frequently as a result of the Writing Project.	25% of participants say they do this more frequently as a result of the Writing Project.

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
12. Students use a computer to make changes to their stories, papers, or reports.			
At all grade levels, students who almost always use computers to make changes to their papers scored higher than students who never or hardly ever did and those who only sometimes used them.	33% of NWP teachers say they almost always have their students use a computer to make changes to their stories or reports.	41% of NWP teachers say they almost always have their students use a computer to make changes to their stories or reports; an additional 44% say they sometimes do this.	51% of NWP teachers say they almost always have their students use a computer to make changes to their stories or reports; an additional 38% say they sometimes do this.
At the 4 th grade level, there was no significant difference between students who sometimes used computers and students who never or hardly ever did.	32% of participants say they do this more frequently as a result of the Writing Project.	26% of participants say they do this more frequently as a result of the Writing Project.	29% of participants say they do this more frequently as a result of the Writing Project.
At the 8 th and 12 th grade levels, students who sometimes used computers scored higher than those who never or hardly ever did.			

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
<p>13. When assessing student writing, teachers emphasize the quality and creativity of students' ideas.</p> <p>At all grade levels, students whose teachers felt that the quality and creativity of their students' ideas was moderately or very important scored higher than those who felt this was not very important.</p> <p>Moreover, all students with teachers who felt that quality and creativity were very important scored higher than those with teachers who felt this was only moderately important.</p> <p><i>(Note: 1998 NAEP 4th grade findings are reported because this item was not included on the 2002 questionnaire.)</i></p>	<p>100% of NWP teachers say that the quality and creativity of their students' ideas is moderately or very important; of these, 94% say that it is very important.</p> <p>85% of participants say they emphasize this more as a result of the Writing Project.</p>	<p>100% of NWP teachers say that the quality and creativity of their students' ideas is moderately or very important; of these, 95% say that it is very important.</p> <p>79% of participants say they emphasize this more as a result of the Writing Project.</p>	<p>99% of NWP teachers say that the quality and creativity of their students' ideas is moderately or very important; of these, 90% say that it is very important.</p> <p>73% of participants say they emphasize this more as a result of the Writing Project.</p>

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
<p>14. When assessing student writing, teachers emphasize the way the students' papers are organized.</p> <p>At all grade levels, students whose teachers felt that the organization of students' papers was moderately or very important scored higher than those who felt this was not very important.</p> <p>Moreover, 8th and 12th graders whose teachers felt organization was very important scored higher than those whose teachers felt organization was only moderately important.</p> <p><i>(Note: for 4th grade, 1998 NAEP findings are reported because this item was not included on the 2002 questionnaire.)</i></p>	<p>99% of NWP teachers say that the way students' papers are organized is moderately or very important.</p> <p>58% of participants say they emphasize this more as a result of the Writing Project.</p>	<p>100% of NWP teachers say that the way students' papers are organized is moderately or very important; of these, 71% say that it is very important.</p> <p>46% of participants say they emphasize this more as a result of the Writing Project.</p>	<p>99% of NWP teachers say that the way students' papers are organized is moderately or very important; of these, 76% say that it is very important.</p> <p>43% of participants say they emphasize this more as a result of the Writing Project.</p>

TABLE 3.
Findings for Each Classroom Practice Associated with Higher Student Achievement

NAEP findings on contribution of classroom practices to student achievement	Practices of NWP teachers		
	Elementary school (grades 3-5)	Middle school (grades 6-8)	High school (grades 9-12)
15. When assessing student writing, teachers emphasize spelling, punctuation, and grammar.			
At all grade levels, students whose teachers felt that spelling, punctuation, and grammar were at least moderately important scored higher than those who felt it was not very important.	58% of NWP teachers say that spelling, punctuation, and grammar are moderately important; an additional 33% say that they are very important.	58% of NWP teachers say that spelling, punctuation, and grammar are moderately important; an additional 36% say that they are very important.	56% of NWP teachers say that spelling, punctuation, and grammar are moderately important; an additional 37% say that they are very important.
At 4 th and 12 th grades, students of teachers who felt that spelling, punctuation and grammar were of moderate importance scored highest. At 8 th grade, students of teachers who gave these skills high importance scored highest.	25% of participants say they emphasize this more as a result of the Writing Project.	23% of participants say they emphasize this more as a result of the Writing Project.	19% of participants say they emphasize this more as a result of the Writing Project.
<i>(Note: 1998 NAEP 4th grade findings are reported because this item was not included on the 2002 questionnaire.)</i>			

V. CONCLUSION

When teachers rated the quality and value of the summer 2003 NWP invitational institutes on the Satisfaction Survey, more than 97% said that the program was high in quality and that what they learned would be valuable. One year later on a follow-up survey, high proportions of those teachers reported that they indeed gained valuable knowledge and skills from the institute and, further, that they have changed their classroom practices as a result. These findings indicate that NWP institutes support teachers in emphasizing classroom practices that give students control over the processes and skills of writing, as well as practices that enable students to use writing to learn and communicate in all curriculum areas.

Moreover, high proportions of teachers reported that these changes in their practices are benefiting their students in both their skills and their attitudes about writing. Comparisons with findings for grades 4, 8 and 12 from the 2002 NAEP Writing Assessment indicate that NWP institutes promote classroom practices that are correlated with higher achievement in writing on the Nation's Report Card.

In sum, this study suggests that NWP institutes offer professional development programs to teachers that are high in quality and influential in positive ways in teachers' classrooms.