

**Alabama Secondary School English Teachers' National
Writing Project Participation and Own Writing
in Relation to Their Organization of the Classroom
and to Student Achievement in Writing**

**Final Report Submitted to the National Writing Project,
Berkeley, California**

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Abstract

This study of 32 public secondary school English teachers in the state of Alabama and of 477 students in these teachers' participating classes, employed teacher and student surveys and early- and late-in-course samples of timed narrative and persuasive writing. As predicted, NWP teachers wrote more extensively than comparison teachers, and the participating teachers' own active writing practice was associated with their students' achievement in writing. Less routinized organization of the classroom was associated with students' achievement in writing. Teachers' higher level of ongoing involvement in NWP professional development activities predicted their students' achievement on nonroutine attributes of writing.

Alabama Secondary School English Teachers' National Writing Project Participation and Own Writing in Relation to Their Organization of the Classroom and to Student Achievement in Writing

This report describes teachers' self-reported own writing, their ways of organizing the classroom as an environment for students' development as writers, and their ongoing involvement in National Writing Project (NWP) professional development activities, in relation to their students' achievement in writing. Participants included 17 teacher-consultants (TCs) affiliated with three Alabama National Writing Project (NWP) sites and 15 comparison (non-TC) teachers. All participating teachers taught secondary (grades 7-12) English language arts in 2004-2005.

Program and comparison teachers were matched as closely as possible based on the grade and track level of the participating class, information provided by their school principals, and the principal's assessment of whether the teacher was more "typical" or more "outstanding" as a teacher of writing. All TCs whose contact information was available through the three NWP sites were invited to participate in this study. The participating teachers' responses are analyzed in relation to 477 middle and high school students' writing achievement over a 2 to 6 month period.

Research Questions

The research described in this report focused on the following set of questions:

- Do NWP TCs report more extensive writing lives than comparison teachers?
- Is a teacher's NWP affiliation associated with students' achievement on measures of nonroutine aspects of writing?
- Are teachers' reported writing lives associated with students' achievement on measures of nonroutine aspects of writing?
- Is a teacher's NWP affiliation associated with their reported use of complex instructional methods and materials for teaching writing?
- Is the reported use of complex instructional methods and materials for teaching writing associated with students' achievement on measures of nonroutine aspects of writing?
- Does a teacher's level of ongoing NWP professional development activity predict her or his students' achievement on measures of nonroutine aspects of writing?

This study builds upon two bodies of literature on school practice. One is the literature on NWP TCs' construction of writing as an uncertain task (e.g., Frank, 2001). The other is a body of work on how the organization of the classroom affects student interaction and performance on nonroutine tasks (e.g., Cohen, 1986; Cohen & Lotan, 1997). In the current study, I examined data on teachers as writers themselves, because when classroom teachers are also writers, their writing lives will arguably affect their understanding of how their students write. Teachers who have extensive writing lives are likely to understand writing to be an uncertain rather than routine task; this understanding may lead them to establish classroom work arrangements that introduce and teach writing as an uncertain (i.e., nonroutine) task of invention and arrangement, rather than as a restricted, routine task such as multiple-choice and short-answer exercises (see Applebee, 1984; for a description of formulaic writing in school genres: see Hillocks, 2005). This research thus considers whether classroom work arrangements that generate an exchange of

ideas about students' writing-in-progress will result in increased productivity (Whyte, 2007), one measure of which is scores on valid writing tests.

Writing is an inherently uncertain task. The theoretical framework for this research conceptualizes writing beyond multiple-choice and short-answer exercises, and/or routinized formulaic school genres. I expected that delegating intellectual authority to students as writers (rather than directly supervising and routinizing students' composing processes), would predict students' achievement in writing. Indeed, federal writing assessments and the work of the Chicago School Consortium have both shown that assignments that are productively uncertain support growth in writing proficiency (National Writing Project & Nagin, 2003).

As will be explained in this report, the NWP core program—the summer invitational institute—emphasizes teachers' lives as writers and focuses on ways to organize the classroom as an environment for writing. NWP professional development highlights the value of teaching writing not only as a routine, but also more broadly in society as an uncertain task. Therefore, I expected that the NWP teachers who participated in the study would report more extensive lives as writers than the comparison teachers, would organize their classrooms to support writing as an uncertain task, and in turn, would have students whose achievement was greater than that of the comparison teachers' students.

Program Focus and Context of Study

The three Alabama NWP sites that participated in this study had all been assessed by the NWP during its most recent annual evaluation of sites' operations and productivity as having demonstrated fidelity to the NWP model of teacher change and consequent improvement of school practice. The NWP model centers on five “core principles” (McDonald, Buchanan, & Sterling, 2004, p. 85):

1. Writing should not only be assigned but also *taught* K-16.
2. Although there is no one right approach to the teaching of writing, some practices are more effective than others; a research-informed community of practice is positioned well to design and develop comprehensive writing programs.
3. To develop professionally, teachers need frequent opportunities to systematically examine research and practice.
4. Teachers K–16 are the ideal agents of reform, and schools and universities are the ideal partners for investing together in that reform.
5. Teachers of writing must write (McDonald et al., 2004, p. 85).

The TCs from participating NWP sites showed complexity and variability in the ways they enacted these five principles. The core program at every NWP site was a four- to five-week summer invitational institute, incorporating three elements: teachers themselves writing, demonstrations of teaching writing, and professional reading and study. The site characteristics and particular programs reported by each of the participating NWP sites during 2004-2005 are summarized below.¹

Red Mountain Writing Project

At the time of this study, the Red Mountain Writing Project was in its first year of operation at the time of this study and served 17 school districts enrolling students who represented a higher percentage of African Americans than either the United States or the state of Alabama. The needs of this service area were varied. Some schools within this service area were well funded, and students in those schools easily met the requirements of state-mandated assessments, specifically the Alabama Direct Assessment of Writing and the Alabama High School Graduation Exam. In schools with fewer resources, students struggled with the state-mandated assessments. Table 1 displays the characteristics of the Red Mountain Writing Project.

Table 1
Site Characteristics of the Red Mountain Writing Project (Est. 2004)

	Writing	Teaching Demonstrations	Professional Reading & Study	Other
Summer Institute (n =20)	<ul style="list-style-type: none"> • Journals • Daily logs • Anthology of TCs' professional and creative writing 	<ul style="list-style-type: none"> • Teaching demonstration mentoring • Post-teaching-demonstration feedback 		<ul style="list-style-type: none"> • Minilessons on writing research • Attended two-day conference on the writing and teaching of children's and young adult literature • Guest speakers • Roundtable discussions of school issues
Continuity (n =20)	Writing group			
Inservice				
TCs in leadership roles (n =4)				
Other programs	<ul style="list-style-type: none"> • Cosponsors the University of Alabama Birmingham (UAB) Young Authors Conference • Cosponsors UAB's Mid South Reading and Writing Institute 			
TC writing				

Sun Belt Writing Project

The Sun Belt Writing Project is the longest-established NWP site in Alabama. Except for the year 2000-2001, when its federal funding was withdrawn by the National Writing Project and the reconstituted site was applying for renewal of its funding, the site had been in continuous operation for 23 years, since 1981. It serves a population based primarily in Lee County, Alabama, comprising 74 percent European American and 23 percent African American students. The site focuses its annual TC recruitment on identifying and recruiting widely respected teachers of writing who serve high-needs schools and students. Table 2 displays the characteristics of the Sun Belt Writing Project).

Table 2
Site Characteristics of the Sun Belt Writing Project (Est. 2001)

	Writing	Teaching Demonstrations	Professional Reading & Study	Other
Summer Institute (n = 18)	<ul style="list-style-type: none"> • Personal writing • Dialogue journals • Paired peer share • Response groups • Fellows submit three or more pieces of writing, including one piece of professional writing, to the SI anthology 	<ul style="list-style-type: none"> • Teaching demonstration coaching and modeling • New TCs begin teaching demonstrations during the first week 	<ul style="list-style-type: none"> • Personal study (of professional books selected by TCs and purchased for them with federal flow-through funding) • Common readings and literature circle discussions of professional books selected by site co-directors • Reading pairs 	<ul style="list-style-type: none"> • Organizational meeting in May • Drop-in, or “homecoming” visits from SI alumni
Continuity (n = 21)	<ul style="list-style-type: none"> • Winter-into-Spring Writing Retreat • Monthly continuity events involving writing & talk about school practice 			<ul style="list-style-type: none"> • Listserv • Annual NWP/NCTE conference
In-service (n = 15)	<ul style="list-style-type: none"> • Field Literacy Project, Auburn University at Montgomery • TCs in an elementary school cohort provide an integrated reading-writing program 	<ul style="list-style-type: none"> • Summer Problem-Based Learning mini-institute for Auburn City Schools English language arts teachers • Reading-writing connection series in Opelika City Schools 	<ul style="list-style-type: none"> • Yearlong study group of teachers at Opelika Middle School • Teacher study group at Samford Middle School 	<ul style="list-style-type: none"> • Fall Harvest Table with teaching demonstrations, sharing of professional literature, writing, and sharing of writing • School-situated inservice at Opelika HS
TCs in leadership roles (n = 17)				
Other programs (n = 4)	<ul style="list-style-type: none"> • Memoir class for the Auburn University Adult Lifelong Learning program • Cosponsored Young Authors’ Conference • “Poems, Pantomime, Puppets, and Performance!” a 4-day acting/writing workshop for children ages 9–12 			
TC writing (n = 2)	<ul style="list-style-type: none"> • TC Art Belliveau published an article in fall 2004 in the online journal <i>HYPERLINK</i> http://facultllyshack.org • May 2004, TC Pam Stockinger, “The Power of One Author: Changing (Writing) Lives of Teachers in the English Language Arts Methods Course” in <i>Making Connections: Students and Authors on the Same Page</i>. 			

Mobile Bay Writing Project

At the time of this study, the Mobile Bay Writing Project served a five-county area encompassing both rural and urban school systems. The site reported that the area was experiencing a large influx of Hispanic and Asian students, who were also high-needs students who struggled with the literacy skills required for success on state measures of achievement in reading and writing. In Mobile County, 63 percent of students were from low-income families. The Mobile Bay Writing Project had been in continuous operation for six years at the time of this study.

Table 3
Site Characteristics of the Mobile Bay Writing Project (Est. 1998)

	Writing	Teaching Demonstrations	Professional Reading & Study	Other
Summer Institute (n = 20)	<ul style="list-style-type: none"> • Morning writing with warm-ups, demonstrations, and activities • Personal writing time • Writer’s workshop • Anthologies of TC professional and creative writing 	<ul style="list-style-type: none"> • Modeling of teaching demonstrations before TCs give them 	<ul style="list-style-type: none"> • Daily group discussions on action research 	<ul style="list-style-type: none"> • Four team leaders model for and coach new TCs • Use a rotating roundtable interview format • Pre-institute where TCs receive information on events, responsibilities, staff, and other TCs as well as articles about NWP • Field trips • Guest speakers
Continuity (n n/a)	<ul style="list-style-type: none"> • January Writing Retreat 			<ul style="list-style-type: none"> • Christmas social • Mad Hatter’s Tea Party (Spring) • June reunion of MBWP fellows
In-service (n n/a)	<ul style="list-style-type: none"> • Miniconference on writing • Team leaders host inservice events at their schools throughout the year 	<ul style="list-style-type: none"> • New TCs responsible for two of five inservice events 		<ul style="list-style-type: none"> •Partners with regional inservice center
TCs in leadership roles (n = 30)				
Other programs	<ul style="list-style-type: none"> • “Writing on the Walls” fair at Robert E. Lee Elementary School • Young Authors’ Conference for students grades 1--5 			
TC writing				

Literature

Theoretical Framework

Teachers' Writing Lives

The theoretical framework for this study relates to the NWP principle that teachers of writing should be writers themselves. Jim Gray, the founder of the NWP, stated:

That teachers of writing must write, as well as read and talk about the teaching of writing, is one of the major assumptions of the writing project, important not only in the invitational summer institute but also in the range of follow-up programs sponsored by the project. (Gray, 2000, pp. 143-144)

This principle is a “defining feature” (McDonald et al., 2004, p. 95) of the four- to five-week Invitational Institute that is the core program at all 189 NWP sites (all 50 states, Washington, DC, Puerto Rico, and the U.S. Virgin Islands).

Across NWP sites, teacher-consultants themselves practice writing together and orally present that writing. Many NWP work sessions involve voicing problems and successes and negotiating meaning through writing (Lieberman & Wood, 2003). Throughout its history, the NWP has affirmed that teachers' writing lives are essential to students' growth, identity, and achievement as writers—but this tenet of the NWP model of teacher professional development has rarely been empirically studied. The present research contributes to the literature on the role of teachers' own lives as writers in developing students' literacy, agency, and voice.

Classroom as a Community of Writers

Olson (2007) has described secondary English language arts classroom work arrangements that reflect her experience as a member of the National Writing Project. Olson uses the term *community* to refer to these classroom work arrangements, often employed by exemplary teacher-consultants affiliated with the NWP. Teachers in a classroom writing community have having multiple roles: *senior member* of a working group of writers and readers of literature, *facilitator*, *response provider*, and *assessor* (this last role reserved until after the other teacher roles have been established) (C. Tennant, Sun Belt Writing Project TC, personal communication, June 19, 2007).

Ethnographic research on teachers who write and whose students are aware of their teachers' writing likewise suggests that students' development as writers arises from teacher's and students' mutual experience of the culture of the classroom as a writing community. In a two-year ethnographic study of how one NWP TC constructed a community of writers in a primary classroom, Frank (1997, as cited in Frank, 2001) found the teacher's premises and practices to be “grounded in her experiences as an author, which mean[t] that her students [we]re concerned with the social and cultural practices of authors: how writers talk, act, and think, as well as issues concerning the content and mechanics of writing” (p. 469). Analyzing a ten-minute writing conference selected as a *key event* (Gumperz, 1986, cited in Frank 2001) Frank described how this TC and her students co-constructed a classroom culture that enacted writing as not only personal and individual, but also intertextual and social. Through instructional conversations,

these students came “to identify themselves and to be identified as writers who use the social practices of other writers” (Frank, 2001, p. 500).

Writing as an Uncertain, Open-Ended and Group Task

What has been called the *process* approach to teaching writing has become widespread in the United States largely through the influence of the NWP (Pritchard & Honeycutt, 2006). An extremely broad range of approaches to teaching writing from nonroutine to fairly routinized stages through which student progress in concert have all been called *process* approaches. Although process-oriented approaches to teaching writing have been enacted and studied in a wide range of ways, what the various process-oriented methods of teaching writing have in common is that the teacher recognizes that the writer may engage in many kinds of activities, including planning, drafting, revising, editing, and publishing (Dyson & Freedman, 2003).

In an ethnographic study of an urban middle school English teacher’s classroom, Hynds’ (1997) described how the teacher had begun to write poetry in her journal in response to events in class. One day after reading a piece of student writing, the teacher wrote, “Gerri turned in the poem ‘Pictures’ today. Sometimes a student can capture something that I have been trying to write” (p. 234). After the artist-in-residence at the school had brought his novel-in-progress to class, the teacher brought a chapter of her novel to share with her students, describing for the students what kind of response from them to her chapter she was looking for. The students responded with eagerness and enthusiasm, “as fellow writers and literary critics” (p. 235).

Teachers like the one Hynds studied write in ways not restricted to adherence to algorithms for school writing tasks. Teachers who write may be able to exploit the more uncertain aspects of writing even in formulaic school genres and/or may also employ genres that are themselves highly uncertain (e.g., poetry, novel, documented argumentative essay), i.e. meaning that there is no single way of arriving at a high-quality result that can be distilled to a formula or algorithm for the writing task.

Further, teachers who attend a summer institute experience what Spandel (2005, p. 78) calls “the right to see others write.” NWP institute leaders write together with the new TCs participating in the summer institute. Writing-response groups meet regularly and institutionalize the condition that while participating teachers are continually experiencing writing as a highly uncertain task, there is continual face-to-face oral interaction to further critical thinking and creative problem-solving (Lotan, forthcoming, b). NWP leaders help the writing-response groups develop norms to ensure that the writer directs the group’s response to her or his writing-in-progress, and that the group’s response will be skillful (e.g., tied to specific features of the text, phrased as one reader’s experience of the text rather than as a directive). This experience positions the TC to return to her or his classroom and initiate similar work arrangements for herself or himself, together with her or his students.

Structured Versus Open-Ended Approaches to Writing

Teachers across all grades and subjects can assign students what Lotan describes as two different types of tasks: “well-structured, routine tasks” and “open-ended, uncertain, nonroutine tasks.” According to Lotan, routine tasks follow clear, detailed procedures and precise steps to arrive at a correct answer or a predictable solution. In contrast, with open-ended tasks, there are many uncertainties and ambiguities. By assigning such tasks, teachers delegate intellectual authority to

their students, thus making students' life experiences, opinions, and points of view legitimate components of the content to be learned (Lotan 1997, cited in Lotan forthcoming, a).

In contrast, most school writing is taught as a well-structured, *routine* task. While some personal experience as a writer may be imported into school writing assignments, typically school assignments do not require students to negotiate meaning among themselves, or with the teacher in order to extend their previous experiences as they compose text. Rather, students are instructed in how to produce a few “foreordained” (Hillocks, 2005, p. 243) frameworks for paragraphs and longer writing assignments (e.g., the “five paragraph” essay). The construction of writing as a routine task is a strong, persistent norm in school, including in secondary English language arts classes (Hillocks, 2005; Johnson, Smagorinsky, Thompson, & Fry, 2003).

However, research on teachers who have been inducted into the NWP through the initial intensive summer institute suggest that they may construct not only their own but also their students' writing as an open-ended, nonroutine task (i.e., Freedman, 1987; Lieberman & Wood, 2003). In these teachers' classrooms, students may be supported in orchestrating their own composing processes rather than being held to uniform, teacher-mandated phases of composing (e.g., generating, transcribing, revising) (Sperling & Freedman, 2001). NWP TCs may come to see the necessity of different students doing different tasks; they may come to understand the value of delegating some authority to individual students rather than directly supervising every aspect of their writing (Cohen, 1986).

Classroom Work Arrangements and Productivity

Empirical studies of elementary and middle school classrooms where different students work simultaneously in small groups on various nonroutine tasks have documented an association between the amount of high-quality interaction about the task among students, and performance on measures of conceptual as well as factual learning (e.g., Cohen, 1989; Cohen, Lotan, Abram, Scarloss, & Schultz, 2002). Recent empirical research on high school students' development and achievement as writers has documented this same association in the context of secondary English language arts (Whyte, 2007).

Teachers' Joint Problem-Solving and Productivity

Cohen and Cohen (1991) analyzed groups of children working together in classrooms as well as teams of adults in workplace settings, and concluded that only under the conditions of a highly uncertain, open-ended, group task, will interaction result in increased productivity. Such conditions pertain for TCs who are active participants in the NWP network.

Several key NWP principles institutionalize work arrangements that delegate intellectual authority to teachers and continually involve TCs in joint problem-solving—beyond a superficial exchange of teaching materials concerning technologies (i.e., methods and materials) for teaching writing. The NWP's approach to professional development and school change stipulates that “there is no one right approach to the teaching of writing,” that “a research-informed community of practice is positioned well to design and develop comprehensive writing programs,” and that “to develop professionally, teachers need frequent opportunities to systematically examine research and practice” (McDonald, Buchanan, & Sterling, 2004, p. 85). Fidelity to these principles is maintained through the annual review of each NWP site.

The Current Study

This study examines teachers' own experiences as writers. It investigates how NWP TCs provide their students with classroom work arrangements that support students' ability to orchestrate their own composing process. An important aspect of teachers' identities and consequent practices as writers arising from the NWP summer invitational institute is the continual experience of writing as a highly uncertain task.

I hypothesized that TCs would tend to view their role as *senior practicing writer* in a classroom *community of practicing writers* as part of how they organize the classroom and interact with students. I anticipated that work arrangements in these TCs' classrooms would support critical thinking and creative problem-solving between the teacher and students. I further expected that these work arrangements would be associated with productivity in the form of students' narrative- and persuasive-writing effectiveness. In addition, NWP TCs were expected to be more likely than non-TCs to construct the *teaching* of writing as a nonroutine task that is best carried out by teachers working jointly, problem-solving together.

Thus, TCs with greater continual access to resources for designing writing instruction as a nonroutine task conducted in a classroom arranged as a community of writers were expected to reach higher-quality solutions in their practice and have their students achieve at a higher level, than TCs who participated less in NWP work—especially on measures of achievement related to nonroutine aspects of writing. While I do not make claims that there are causal relationships among teachers' NWP participation, their writing lives, classroom work arrangement, and students' achievement, the present research enhances our understanding of the associations among these dimensions of school practice.

Methods

Setting and Participants

Alabama was a suitable place to conduct this study for several reasons. Much of the state is rural, and a high proportion of students come from low-income households. According to 2005 data reported by National Center for Educational Statistics (NCES), 50% of the state's public school students qualified for free- or reduced-priced lunch, and 56% of public school students attended Title I schools. In addition, previous research (Freedman, 1987) has shown that rural schools, particularly in secondary grades (relevant to current study), are contexts in which there are strong pressures against organization of the classroom to support the nonroutine aspects of writers' work.

As for students' writing ability, the 2000 National Assessment of Educational Progress (NAEP) designated 51% of Alabama students tested as "basic" writers; 20% as "proficient," and only 1% as "advanced" (NCES, 2005). In the state-mandated assessment, state proficiency tests consisted not only of scores on mechanics and other grammatical conventions, but also of scores on discourse-level qualities of writing. Although the Alabama high school graduation examination comprises mainly of true/false questions, the Alabama Direct Assessment of Writing (ADAW) administered at grades 5, 7, and 10 affords writing teachers with an assessment

system (Morton, J. B., 2004) that can capture some of the invention and development of material, prosody, and attunement to audience that have historically characterized NWP culture and methods (Gray, 2000; Lieberman & Wood, 2003). As a timed writing test, ADAW does not provide students the opportunity to select the rhetorical situation or context for a piece of writing, or the opportunity to work with peers and revise drafts. Nevertheless, ADAW does accommodate highly proficient students' voice and range more fully than would forced-choice tests of grammatical conventions. Hence, Alabama was a state where the environment of schools as technical organizations (subject to inspection of their core operations through state-mandated testing, Coburn, 2004) afforded secondary English language arts teachers opportunities (especially through NWP affiliation and participation) to teach the full range of writing as an authentic social practice.

Procedures

Eligibility and Selection of NWP sites and TCs

Based on annual review of sites' applications for renewal of funding, and in consultation with the NWP leadership, I developed a set of criteria to identify NWP sites in Alabama that were fully implementing the NWP professional development model. A total of 5 sites met the criteria and were eligible to participate in the study. These sites had stable leadership at and had expressed willingness to participate in the study.

With 2 graduate student research assistants, I developed a census list of TCs at these five NWP sites who fit three descriptors: teachers of English language arts in grades 7–12, teaching at a public school during the 2004–2005 school year, and not scheduled for maternity leave or any other extended absence from school. As director of the Auburn University site (one of the 5 sites in this study), I telephoned and e-mailed the other four NWP site directors to solicit the names and contact information of potential participating TCs. All of the NWP site directors we contacted provided names of at least several TCs, with varying degrees of detail. The research team pursued all the contacts provided to us by the NWP site directors.

Selecting Comparison Teachers

For each TC selected for the study, we asked the school principal to identify a comparison teacher who was as close a match as possible in two ways: a teacher of the same or a similar grade level, teaching a class of similar achievement level (standard/honors). Self-contained remedial and Advanced Placement classes were excluded from the study.

Using this procedure, we selected one class taught by each teacher identified by the principal. Additionally, we asked the principal to rate each participating teacher, as either a "typical" teacher of writing or an "outstanding" teacher of writing. While we decided to exclude any teacher who was considered to be "struggling with classroom management this year," we wished to compare and study teachers across a range of competency as assessed by the principals.

Recruitment

We sent invitational letters and consent forms to each prospective participating teacher-consultant and comparison teacher identified by the principal. We followed up on these letters with phone calls and emails to request each teacher's decision to accept or decline our invitation to participate.

We successfully recruited TCs and comparison teachers from 4 of the five NWP sites in Alabama identified as eligible at the outset of the study. NWP leadership reviewed the list of included sites to determine whether any changes in site’s status had occurred since the initial design of the study. One of the 4 selected sites fell into this category; therefore, the data presented in this report come from teachers of 3 of the originally selected sites.

We also excluded from our analyses any class in which fewer than five students provided both parent and student consents, completed the student survey, and completed tests of achievement in writing. Because several classes had fewer than five students’ survey data and/or fewer than five late-in-course student writing samples, the initial 32 participating teachers from the three remaining sites included 6 participating teachers who were a TC matched with a comparison teacher at a demographically similar school or a TC and comparison teacher at the same school who were not exactly matched (e.g., attrition of a grade 7 standard track TC and grade 8 standard track comparison teacher).² Results of t-tests and chi-square tests on teacher demographic variables (Table 4) indicated no significant differences between the Program and Comparison groups.

Table 4
Demographic characteristics of participating teachers (N = 32)

Site	Gender				Ethnicity			
	Program (n=17)		Comparison (n=15)		Program		Comparison	
	Female	Male	Female	Male	African American	White	African American	White
Red Mountain ^a (n=9)	3		2		1	2		3
Sun Belt (n=17)	7	2	6	2		9		8
Mobile Bay (n=6)	3	1	2			4		2

^aData missing on all items for 1 TC and 3 comparison teachers.

As for variables indicating teacher professional experiences, Program teachers had significantly longer experience in formal leadership positions than Comparison teachers ($F = 11.93, p < .01$). However, there were no significant differences between Program and Comparison teachers in their likelihood of having served as a professional development provider in writing instruction at the school, district, or state level ($F = 2.65, p = .12$).

In addition, analyses were performed to examine differences between the *students* of Program and Comparison group teachers on demographic characteristics and indicators of academic achievement. No significant differences were found between the students of Program and Comparison group teachers.

Data Collection Instruments

Early- and Late-in-Course Student Writing Samples

Two samples of each student's writing were collected as a means to directly assess growth in writing achievement during the year. We selected 4 prompts from the NWP's archive of writing-assessment prompts that were appropriate for all grade levels in the study and were fairly equivalent in approachability and difficulty. Two prompts required narrative writing, in an effort to capture poetic, literary, or imaginary proficiency (Applebee, 1984; Britton, Burgess, Martin, McLeod, & Rosen, 1975). The other two prompts required persuasive writing, and were chosen to represent informational (Applebee, 1984) / transactional (Britton et al., 1975) writing tasks.

The writing prompts were assigned in a partially counterbalanced design. The first administration was in October- November or in January – February (depending on type of school year system). The second writing test was administered in late April for all participating classes. Each student was randomly assigned to prompt A, B, C, or D for the first writing test. To avoid prompt effects, students who received a narrative prompt for the first test also received a narrative prompt for the second test; students who received a persuasive prompt for the first test received a persuasive prompt for the second test.

Surveys

In spring semester of 2005, each participating class was sent a set of teacher and student surveys to complete. Both surveys were designed and adapted based on feedback from NWP teacher-consultants (who were not participants in the study). These teacher consultants provided suggestions regarding wording of items to make them clear and accessible to junior and senior high school students. The teacher survey took about 60 minutes to complete, while the student survey took about 30 minutes to complete.

Teacher's writing life. Teachers' writing life was measured with 4 teacher survey items that assessed the frequency with which teachers engaged in public/semi-public writing or oral presentation of writing in progress. The four items were: (a) posting writing online, (b) making entries in a teaching journal or doing teacher research; (c) meeting with others to share writing, get feedback, give comments on writing; and (d) writing for pay. Each item was scored on a 6-point likert-type scale ranging from 1 = *never* to 6 = *every day*, and the scores were summed to generate an index of teachers' writing life, ranging from (4-24).

Routine, literature-focused teaching. This measure concerns a "script," a persistent norm for teaching literature in secondary English classrooms (Grossman, 2001, p. 421), in which teachers ask questions about the texts; students offer short responses; and teachers respond with evaluations and elaborations. This routine, literature-focused teaching was assessed with 4 items in which students were asked to report the frequency of summarizing reading, writing short answers to questions, working on literature, and note-taking ($\alpha = .61$).

Process approach. This measure is comprised of 7 items assessing the extent to which teachers implemented semi- or nonroutine ways to organize the classroom as a writing environment. Students reported the frequency with which their teachers had them do the following: use suggestions from other students in the class to improve writing on a particular assignment; brainstorm with other students to get ideas for writing; work in small groups with classmates to read and make comments on each other's writing; work on several drafts of writing; talk with classmates about a piece of writing; make suggestions to a classmate to

improve his or her draft; and request feedback from classmates on a piece of writing. Responses were summed to create an aggregate variable of process approach ($\alpha = .89$).

Honors track. This dichotomous variable indicated whether a classroom was honors track or standard track.

NWP affiliation. This variable was coded dichotomously and indicated whether the teacher was a TC (Program) or a Comparison group teacher.

Affiliation intensity. NWP affiliation intensity was a variable for the 13 TCs who provided information on their level of site activity beyond the summer institute. The TCs were classified into 4 groups based on the total average number of hours of site work during the years they had been affiliated with the NWP. Those who reported 0 average hours per year were coded “1” ($n = 1$ TC), TCs who reported 1–25 average hours per year were coded “2” ($n = 5$ TCs), TCs who reported 26–50 hours per year were coded “3” ($n = 4$ TCs), and TCs who reported 51 or more hours per year were coded “4” ($n = 3$ TCs).

Scoring Student Writing

To ensure technical rigor and credibility, scoring and data processing were conducted nationally and independently of the Sun Belt Writing Project and Auburn University. The scoring used a modified version of the Six+1 Trait writing model (Bellamy 2005). This evaluative framework includes a rubric that attends to six attributes of a student’s writing:

- *Ideas / Content Development*—establishing purpose, selecting and integrating ideas, including details to support, develop, or illustrate ideas
- *Organization*—creating an opening and closing, maintaining focus, ordering and relating events, ideas, details to provide coherence and unity in the writing
- *Voice*—communicating in an engaging and expressive manner, revealing the writer’s stance toward the subject
- *Sentence Fluency*—constructing sentences to convey meaning, controlling syntax, creating variety in sentence length and type
- *Word Choice*—choosing words and expressions for appropriateness, precision, and variety
- *Conventions*—controlling grammar, punctuation, spelling, capitalization, and paragraphing.

A national panel of experts on student writing, along with senior NWP researchers, modified the 6+1 Trait writing model to make it more appropriate for use in research studies. The following modifications were implemented in the rubric prior to the scoring conference:

- The scale of the rubric was extended from four to six points in order to ensure sufficient discrimination and therefore to allow increased sensitivity to any changes that might be observed.
- The language defining the traits was clarified to enhance the reliability of evaluative judgments.
- The evaluative judgments were modified to focus exclusively upon the student writing (where, on occasion, the rubric previously included references to the reader’s reactions or to the writer’s personality as the basis for judgment).

These modifications resulted in the Analytic Writing Continuum (AWC) assessment system.

The Alabama writing samples were among 7505 from five LSRI sites scored at a national conference held in June 2005. Student writing was coded, with identifying information removed so that scorers could not know any specifics of the writing sample being evaluated (e.g., site of origin, group (program or comparison), or time of administration (pretest or posttest/early- or late-in-course)). Of the papers from students in the middle and high school grades—which included all of the student samples reported in this research project—52% and 10%, respectively, were scored twice so that reliability could be calculated.

The scorers participated in six hours of training at the beginning of the conference. Their scoring was calibrated to a criterion level of performance at that time, and was then recalibrated following every major break in the scoring (meals and overnight). Overall, reliabilities (measured as inter-rater agreement, defining agreement as two scores being identical or within one single score point of each other) ranged from 90% to 95%, with an aggregate across all scores of 92%. At the middle and high school levels, which were the focus of this study, reliabilities ranged from 86% to 96%, with an aggregate across all scores of 93% for middle school and 89% for high school (See Appendix A for complete analysis of the reliability of the scoring of student writing). All scores were double-entered independently and the files compared. The resolution of all discrepancies produced a highly accurate data file for use in our analysis.

Results

Descriptive Findings

Teachers' Writing Lives and NWP Affiliation

As predicted, the participating NWP teachers reported that they wrote more extensively than comparison teachers reported. A total of 29 teachers responded to the 4 survey items asking about their writing lives. The sum of the scores on the 4 items was calculated; the sample was then split by the median score on overall writing life. Among Program teachers, 5 reported writing lives lower than the median value, while 11 reported writing lives higher than the median. Among Comparison teachers, 11 reported lower than the median, and only 2 reported higher than the median. The extent of a teacher's writing life and NWP affiliation were strongly associated with each other; TCs generally had a more extensive writing life ($M = 10.94$) than their non-TC counterparts ($M = 7.00$).

Student Achievement on Nonroutine Aspects of Writing

All students of participating teachers had increased achievement in writing. Table 5 shows the mean scores Early-in-course and Late-in-course for all students. On every indicator, the mean score across all participating teachers' classes was higher in the late-course writing samples than in the early-in-course writing samples. These differences were statistically significant for holistic score and for all six of the dimensions of writing assessed. That is, students in the NWP and comparison teachers' classes, considered together, improved on their holistic writing scores and on their scores for all six attributes of writing between the early- and late-in-course writing tests.

Table 5
Means of Scores on Early-in-Course and Late-in-Course Writing Samples and Change Scores¹ ($N = 477$)

	Mean score Early in course	Mean score Late in course	Change score	t-statistic (change score)
Holistic	3.77	4.00	.23	4.87***
Ideas/Content Development	3.86	4.01	.15	2.85**
Organization	3.66	3.87	.21	3.80***
Voice	3.93	4.17	.24	4.51***
Sentence fluency	3.85	4.01	.16	3.36**
Word choice	3.77	3.95	.18	3.97***
Conventions	3.99	4.13	.14	3.01**

Note. Scale for scores for all measures ranged from 1 (low achievement) to 6 (high achievement);
* $p < .05$ ** $p < .01$ *** $p < .001$

We examined the data separately for Program and Comparison group. Table 6 shows the means and change scores (Late – Early) on writing samples of Program and Comparison group teachers’ students. There were greater improvements among the students of the TCs than among the students of the non-TCs.

Table 6
Means and Change Scores on writing samples of Program and Comparison Group Teachers’ Students²
(Program $n = 246$, Comparison $n = 231$)

	Program			Comparison		
	Early	Late	Change score	Early	Late	Change score
Holistic	3.81	4.16	.35	3.72	3.84	.12
Ideas/Content Development	3.90	4.18	.28	3.82	3.84	.02
Organization	3.67	4.01	.34	3.65	3.72	.07
Voice	3.94	4.35	.41	3.91	3.97	.06
Sentence fluency	3.88	4.14	.26	3.81	3.87	.06
Word choice	3.80	4.07	.27	3.73	3.83	.10
Conventions	4.04	4.22	.18	3.96	4.03	.07

Note. Scale for scores for all measures ranged from 1 (low achievement) to 6 (high achievement)

Analysis of Variance Results

To examine the effect of NWP affiliation on students’ achievement in writing, repeated measures ANOVA analyses were conducted. Table 7 presents the summary statistics of these analyses. There were statistically significant differences between two groups of students. The students of TCs had significantly greater achievement in writing than the students of non-TCs on several nonroutine dimensions of writing: Holistic, Ideas/Content, Structure, Voice, and Sentence Fluency. Only on Word Choice and Conventions (routine element of writing), was there no significant differences between the students of TCs and the students of non-TCs. Moreover, the

¹ At the time of writing, 6 years after the study was conducted, not all data were not available to calculate the statistics (e.g., standard deviations).

² Data file was not available at the time of writing to regenerate the statistics (e.g., Sums of Squares, Mean Square).

data suggest that TC students' achievement on highly nonroutine dimensions of writing did not occur at the expense of learning more routine dimensions of writing.

Table 7

Repeated Measures ANOVA Summary Statistics Examining Differences in Writing Achievement Scores (Program $n = 246$, Comparison $n = 231$)

Attribute	Source	
	Within group (Time)	Group x Time
	F-ratio (Pillai's trace)	
Holistic	23.17***	5.51*
Ideas/Content Development	7.76**	6.45**
Structure	13.98***	6.14**
Voice	19.84***	10.91***
Sentence Fluency	10.92***	4.05*
Word Choice	15.32***	3.35
Conventions	8.88**	.83

* $p < .05$ ** $p < .01$ *** $p < .001$

Relationship Between Teachers' Writing Lives and Students' Writing Achievement

There was a significant interaction effect between the writing lives of the teachers who participated in this study and their students' achievement in writing. This finding pertained to the holistic score and to the attributes of ideas / content, organization, voice, sentence fluency, and word choice of the participating students' writing.

To study the impact of writing life on writing scores, participating teachers were classified into four groups: (a) TCs with High Writing Life (b) TCs with Low Writing Life, (c) Program Teachers with High Writing Life or (d) Program Teachers with Low Writing Life. Table 8 displays means of early-in-course, late-in-course, and change scores in writing achievement for the students of the four groups of teachers.

Table 8
Mean Early- and Late-Course Writing Scores in Classes Taught by TCs and Comparison Teachers with High or Low Writing Life

Writing Life		Program			Comparison		
		Early	Late	Change Score	Early	Late	Change Score
High	Holistic	3.85	4.27	.42*	3.72	4.13	.41
	Ideas/Content	3.91	4.30	.39*	3.84	4.16	.32
	Structure	3.64	4.12	.48*	3.81	4.14	.33
	Voice	3.95	4.52	.57**	3.98	4.31	.33
	Sentence Fluency	3.87	4.25	.38**	4.00	4.15	.15
	Word Choice	3.77	4.17	.40**	3.88	4.09	.21*
	Conventions	4.09	4.27	.18	4.07	4.12	.05
Low	Holistic	3.68	3.78	.10	3.72	3.70	-.02
	Ideas/Content	3.82	3.78	-.04	3.82	3.70	-.12
	Structure	3.62	3.66	.04	3.60	3.58	-.02
	Voice	3.87	3.97	.10	3.88	3.88	0
	Sentence Fluency	3.84	3.78	-.06	3.76	3.75	-.01
	Word Choice	3.71	3.73	.02	3.74	3.75	.01
	Conventions	3.94	3.98	.04	3.93	3.98	.05

* $p < .05$ ** $p < .01$

Students of TCs with high writing lives had scores that increased significantly for *holistic* and on the dimensions of *ideas/content development*, *organization*, *voice*, *sentence fluency*, and *word choice* (all but *conventions*). For the dimension of *word choice*, both groups of teachers with high writing lives had students whose scores increased significantly from early- to late-in-course. Neither of the groups of teachers who reported doing less than the median amount of writing had students whose scores increased significantly on any criterion of writing that was scored.

The students' average late-course writing scores were examined using 2 x 2 repeated-measures analyses of variance. The occasion of the writing assessment administration was the repeated variable; comparisons were made between the students of teachers with high writing life scores and students of teachers with lower writing life scores. A total of 7 of these analyses were performed: one for the holistic assessment and one for each of the six traits of writing scored. Table 9 presents the summary results of these analyses.

Table 9
Repeated Measures ANOVA Comparing Students' Writing Achievement in Classrooms of Teachers Reporting High and Low Writing Lives (High classrooms n = 13, Low classrooms n = 16)

Attribute	Source	
	Within group (Time)	Group x Time
	F-ratio (Pillai's trace)	
Holistic	5.43*	4.77*
Ideas/Content Development	2.41	7.10**
Structure	5.82*	5.79*
Voice	9.96**	7.73**
Sentence Fluency	8.12**	10.78**
Word Choice	10.75**	9.98**
Conventions	1.87	.62

* $p < .05$ ** $p < .01$

Relationship Between NWP Affiliation and Methods of Teaching Writing

In order to explore whether NWP affiliation, the intensity of that affiliation, and teachers' writing lives were associated with the reported use of nonroutine instructional methods and materials for teaching writing, correlations amongst the variables were examined (see Table 10).

There was a strong positive correlation amongst NWP affiliation, teachers' writing lives, and the intensity of affiliation with NWP beyond the summer institute. This interrelatedness of the writerly and professional development activities of TCs was expected; the interdependence between teachers' writing and joint problem-solving regarding writing instruction is the essence of the NWP's professional development model

Contrary to what was hypothesized, no significant relationships were found between the NWP affiliation and teachers' use of a range of methods for teaching writing (process approach). Results of t-tests (not shown here) indicated no significant differences between student reports of NWP and comparison teachers' employment of a process approach to teaching writing ($t = 1.62$, $p = .12$). Interestingly, there was a strong positive relationship between honors track and routine, literature-focused teaching ($r = .64$, $p < .001$).

Table 10
Correlations between study variables

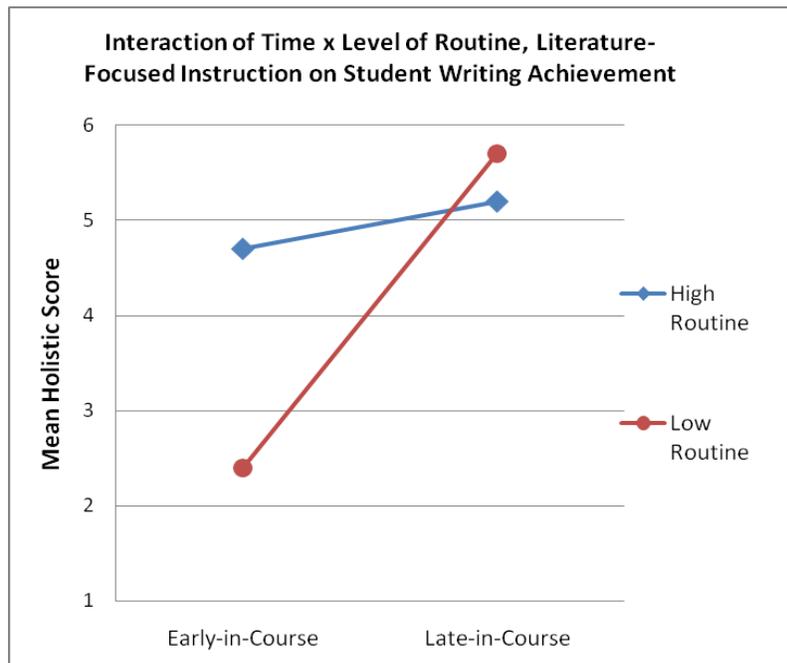
	1	2	3	4	5	6
1. NWP Affiliation	--					
2. Affiliation Intensity	.70**	--				
3. Teacher Writing Life	.51**		--			
4. Routine, literature-focused teaching	-.16		-.27	--		
5. Process Approach					--	
6. Honors Track				.64***		--

* $p < .01$ *** $p < .001$

Relationship between Instructional Methods and Student Writing Achievement

As predicted, there was a significant negative relationship between routine, literature-focused teaching and writing achievement indicated by the holistic score. Conversely, a significant positive relationship was found between process approach to writing and writing achievement indicated by the holistic score.

To determine the extent to which routine, literature-focused teaching was negatively associated with writing achievement, the variable routine, literature-focused teaching was coded dichotomously (one group above the median, and the other group below the median). Then, a repeated measures within-subjects ANOVA was performed. Results showed a significant main effect of time (early- or late-in-course) ($F_{(1,1)} = 7.20, p < .05$) and a significant interaction effect of time by group (high or low level of routine, literature-focused teaching) ($F_{(1,1)} = 6.00, p < .05$)³. Graph of the interaction effect (Figure 1)⁴ showed that early-in-course, students of teachers using more routine, literature-focused instruction had superior writing achievement scores than their peers whose teachers were using relatively low levels of routine instruction. When assessed late-in-course, however, the pattern was reversed. Students in classrooms of teachers using low levels of routine, literature-focused instruction had better writing achievement scores than their counterparts in classrooms of teachers using higher levels of routine instruction. In other words, those who had higher early-in-course writing achievement scores tended to be in honors track, but they did not experience as much / rapid improvement throughout the course as their peers who started out with lower writing achievement scores (generally in standard track).⁵



³ F -ratios were generated from Pillai's trace statistic.

⁴ Figure is based on approximated data.

⁵ I am indebted to Dr. Alejandro Lazarte, assistant professor of psychology at Auburn University for providing the approach reported here to analysis of interaction effects between participating teachers' reported writing lives and their students' writing achievement.

Figure 1. Interaction Effect of Time by Level of Routine, Literature-Focused Instruction on Student Writing Achievement Measured by Holistic Score

To determine the extent to which process approach to writing instruction predicted the holistic score, a regression model was specified in which late-in-course holistic score was regressed on process approach to writing instruction, while holding constant early-in-course holistic score (Table 11). The R^2 value indicated that process approach to writing was a highly significant predictor, accounting for about 55 % of the variance in students’ late-in-course holistic scores after controlling for their earlier writing achievement in the course.

Table 11
Summary of Regression Coefficients of Late-in-Course Holistic Score on Process Approach, Controlling for Early-in-Course Holistic Score (n = 29 classes)

Predictor	Unstandardized Coefficient	Standardized Coefficient	t value
Constant	.15 (.76) ^a		
Early-in-course holistic score	.62 (.14)	.61	4.42***
Process approach to writing instruction	.09 (.05)	.29	2.08*

^aStandard error in parentheses
 $R^2 = .55$; * $p < .05$ *** $p < .001$

Relationship Between Teachers’ Continued NWP Professional Development and Student Writing Achievement

As predicted, a significant positive association was observed between the intensity of TCs’ ongoing site activity beyond the summer invitational institute and student writing achievement on highly uncertain aspects of writing: *holistic* score for overall quality of writing and *ideas/content development*.⁶ The TCs’ participation in ongoing site activity beyond the summer institute constituted engagement in joint problem-solving with colleagues that consequently provided students with access to resources and ideas in the classroom environment where they are writing. A repeated-measures within-subjects ANOVA was conducted to determine whether there existed the expected association between the intensity of TCs’ ongoing site activity beyond the initial summer institute and students’ achievement in writing. The summary statistics shown in Table 12 indicate a further benefit to students in the classrooms of the TCs who were most intensively involved in the continuity programs offered by their local site, the state NWP network, and/or the national NWP infrastructure.

⁶ This result is based on students as unit of analysis, because of the small number of teachers available for this analysis.

Table 12

Repeated-Measures ANOVA for Quality of Writing by Students of TCs with Different Levels NWP Site Activity Beyond the Summer Institute (n = 208 students)

Attribute	Source	
	Within group (Time)	Group x Time
	F-ratio (Pillai's trace)	
Holistic	14.38***	2.90*
Ideas/Content Development	7.89**	4.30**
Structure	17.28***	1.63
Voice	24.43***	2.02
Sentence Fluency	9.55**	1.30
Word Choice	15.09***	1.00
Conventions	1.71	1.04

* $p < .05$ ** $p < .01$ *** $p < .001$

Discussion

The research findings point to three factors that are strongly associated with student achievement in writing: teachers' own extensive writing lives, teachers' organization of the classroom to support writing as uncertain nonroutine activity, and teachers' ongoing participation in NWP professional development. Each of these factors is discussed briefly below.

Teachers' Writing Lives and Student Achievement in Writing

The analysis of how a teacher's own writing life may affect his/her writing instruction and, in turn, the students' writing achievement was based on the premise that NWP teachers engage in the acts of writing and of teaching writing as complementary endeavors. Not surprisingly, the NWP teachers in this study wrote more extensively than the comparison teachers, and TCs' reported writing lives were associated with their students' achievement in writing. NWP teachers who wrote extensively had classes of students whose achievement in writing improved significantly on holistic score for the quality of writing and on the dimensions of writing including *ideas/content development*, *structure*, *voice*, *sentence fluency*, and *word choice*. Students in classrooms with comparison teachers who wrote less did not experience these same gains in writing achievement. These findings are consistent with the NWP's assertion that teachers' own writing is essential to the professional development of teachers of writing.

Organization of the Classroom and Student Achievement in Writing

The significant associations found between broad categories of more- versus less-highly routinized secondary English instruction (i.e., routine, literature-focused instruction and a process approach to writing instruction) and student achievement corroborate the claims in the literature on teaching secondary English language arts (e.g., Grossman, 2001; Prichard & Honeycutt, 2006). Highly routinized, literature-focused instruction in secondary ELA classroom is incompatible with students' development as poetic and transactional writers.

An important implication of this study is that writing instruction in classrooms where writing instruction is non-routinized is not necessarily a "zero-sum game." That is, in classrooms where

teachers understand writing as an uncertain task, student achievement on highly non-routine dimensions of writing does not necessarily occur at the expense of learning more routine dimensions of writing such as organization, vocabulary, and conventions.

NWP Teachers' Network Participation and Student Achievement in Writing

The NWP serves as a community of practice for teacher-consultants, and site continuity programs enhance teacher-consultants' connections to this community, which extends beyond the school. The examination reported here of how the degree of this connection and involvement might, in turn, have an impact on students' writing achievement yielded a positive, statistically significant association between the participating teacher-consultants' reported level of ongoing NWP work (aside from the summer invitational institute) and their students' achievement on two highly uncertain aspects of writing: the reader's experience of the overall quality of a piece of writing and the reader's experience of the quality of a writer's ideas.

Limitations and Future Research

Because the data consist of teachers' self-reports and their students' reports, this study has the limitation of gauging classroom practices through an indirect measure (surveys) rather than through direct observation. The findings of this descriptive study are suggestive rather than definitive regarding patterns of achievement in writing that co-occurred with teachers' writing lives and with the work arrangements in their classrooms.

Overall, the findings of this research support the NWP's professional development model as a way of improving schools. Specifically, the findings of this research validate the NWP's emphasis, in its annual evaluation of sites nationwide, on continuity programs that support teachers' development as writers.

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Appendix A

Analytic Writing Continuum Inter-Rater Reliabilities by Attribute and Grade level

Level	Total N Papers	# papers double scored	Double Score Rate	# of contrasts	Total # adj.	Total % agree	Holistic # adj.	Holistic % agree	Ideas/ Content # adj.	Ideas/ Content % agree	Organization/ Structure # adj.	Organization/ Structure % agree	Voice/ Stance # adj.	Voice/ Stance % agree	Sentence Fluency # adj.	Sentence Fluency % agree	Word Choice/ Diction # adj.	Word Choice/ Diction % agree	Conventions # adj.	Conventions % agree
ES	1188	136	11%	952	101	89%	7	95%	14	90%	13	90%	16	88%	18	87%	16	88%	17	88%
MS	2379	1231	52%	8617	614	93%	54	96%	95	92%	94	92%	107	91%	99	92%	68	94%	97	92%
HS	3938	381	10%	2667	289	89%	23	94%	39	90%	42	89%	54	86%	48	87%	31	92%	52	86%
Total	7505	1748	23%	12236	1004	92%	84	95%	148	92%	149	91%	177	90%	165	91%	115	93%	166	91%

ACKNOWLEDGEMENTS

I wish to thank Dr. Andrew Weaver, head, and the Auburn University Department of Curriculum and Teaching for having been the primary source of the funding of this project. I wish to thank the National Writing Project for also having funded this research and for having, in addition, provided the scoring of student writing samples and provided technical assistance throughout the collection of the data, 2004–2007, from Dr. Linda Friedrich and Dr. Paul LeMahieu. Dr. Alejandro Lazarte, Department of Psychology, Auburn University, provided consultation on data entry and important guidance concerning the initial analysis of teachers' reported writing lives and students' achievement in writing, before the data set was reduced from data representing four to data representing three National Writing Project Sites. Dr. Lazarte and Dr. Isabelle Thompson, Department of English, Auburn University, were helpful in selection of prompts for writing assessment and designing the teacher and student surveys used to generate the analyses reported here. Graduate research assistants Amanda Muse and Richarde Talbot were central to the recruitment of participating teachers and students, data collection, and construction of the initial databases (with the student as unit of analysis and aggregated at the classroom level) of the teacher and student data. Ms. Muse was the primary author of the procedures sections of this report and originated the finding that with the student as the unit of analysis, TCs' level of site activity beyond the invitational institute is associated with students' achievement. Ms. Talbot identified C. Frank's research, which became central to the theoretical framework for this study. Ms. Talbot also conducted the research for and created the descriptions of NWP site characteristics that are included in this report, which needed to be revised only to reflect final cleaning of the teacher and student data sets by the principal investigator. I am therefore grateful to Dr. Lazarte, Dr. Thompson, Ms. Muse, and Ms. Talbot for their contributions throughout the design and conduct of the collection of data reported here, and to Dr. Lazarte and Ms. Muse for their contributions to the analyses reported here.

¹ Originally, our research team embarked upon building the population frame for a mixed-methods comparison-based examination of classroom and school-level organization of English language arts instruction in grades 7–12 across a four-state area in the southeastern United States. Consultation with NWP research associates allowed us to identify sites that were not entirely in compliance with the NWP program model. These were excluded from our initial search. We then contacted site directors at each of the remaining sites in the four-state area that were within a day’s geographical reach to permit future qualitative data collection at a subset of sites. Ultimately, we made contact with 5 site directors in Alabama, 5 in Georgia, 1 in Mississippi, and 1 in Florida. We asked the director to help us identify all current and former TCs from their site. When records were unavailable, we attempted to contact individual TCs who could then provide the names of others in the area.

By the end of the study, we had 77 participating teachers representing 39 schools and 10 National Writing Project sites in the sample. Of these teachers, 37 were TCs and 40 were comparison teachers. During the academic year of our data collection, program evaluators at the NWP headquarters continued analyzing the work of individual sites for compliance with NWP program standards. Upon the conclusion of our data collection, we learned that three of the included sites were determined to be not fully in compliance with the program model. These sites were excluded from the final analyses.

Finally, through negotiations with Paul LeMahieu and Linda Friedrich at the National Writing Project, we determined in February 2005 that, given the balance of these data in only one state, it would be judicious to narrow the study focus to only the state of Alabama and to quantitative survey analysis, rather than including direct observation of classrooms. Doing so presented a sample of 32 teachers (17 TCs and 15 comparison teachers) and 477 students.

² During initial work (spring 2004–fall 2004) on constructing a population frame, our research team identified *pristine* schools, which was a way of oversampling comparison teachers matched individually with TCs at high-density NWP schools (where saturation and diffusion from three or more TCs teaching at the school might have caused NWP norms to have become pervasive). A pristine school was selected to match each high-density NWP school in an effort to ensure that the two were as alike as possible in the following areas: state, setting (rural, urban, suburban), size, free and reduced-price lunch rates, and racial and ethnic composition. We then contacted the principals of these schools and followed the same protocol employed at schools where participating TCs were located, providing the characteristics we were looking for in the comparison teacher.