

The Effects of Writing Pedagogy Education on Graduate Teaching Assistants' Approaches to Teaching Composition

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ABSTRACT

The authors report the initial results from a three-year, two-site, multimodal study of the relationship between formal pedagogy education and teaching practices for graduate teaching assistants (TAs) in first-year writing. Quantitative and qualitative analysis of data from 88 multiple-choice and short-answer surveys and 41 semi-structured interviews demonstrates uneven integration of key composition pedagogy principles into TAs' views of teaching writing; additional analysis reveals very few differences between first- and beyond-first-year TAs or between TAs at the two sites. The authors recommend that on a national level, TA writing pedagogy education be routinely and robustly extended into at least the second and third years of new teachers' work in composition programs. In addition, the authors recommend that writing pedagogy education focus on reflective practice and problem solving to help TAs integrate pedagogical strategies more thoroughly into their principles and practices.

Do you know the effects your teacher preparation program has on the teaching assistants (TAs) in your program?

How do you know?

Unless you are one of a small cluster of college writing pedagogy education researchers gathering systematic data (including Dryer; Ebest; Farris; Liggett; Rankin; Ray; Ruper Taggart and Lowry; and Winslow), your answer is probably much like our answers were five years ago. For the most part, each of us had a collection of *impressions* that led us to believe that our preparation programs were having a measurable and generally positive effect on our newest composition teachers. We were following what we judged to be the best practices in TA preparation; we had also observed TAs

in the pedagogy seminar, discussion groups, and their own classrooms and had seen them implementing approaches we recommended. We saw what we expected (and surely wanted) to see: when we asked them directly, we heard them explain to us what they were learning and how they were connecting those ideas to pedagogical action. They quoted Elbow and Yancey and Brooke to us as they made plans for freewriting, reflective practice, and small group work; they explained how the pedagogy seminar caused them to re-think and expand their approaches to teaching writing; they designed rhetorically situated assignment prompts and gave constructive feedback as we had modeled. Moreover, what external indications we had of their overall teaching abilities were good: strong student course evaluations and, at one site, successful reports from portfolio-based program assessment. We thus assumed that our programs had succeeded in preparing these new teachers, that they had internalized and were consistently using the concepts and strategies to which we had introduced them. But increasingly, the calls from the profession for RAD research (replicable, aggregable, data-based—see Anson and Haswell) made us wonder: did we actually know what we were accomplishing in our work with new and continuing TAs?

In this article, we describe the study that Shelley designed and implemented at George Mason University and that Heidi co-implemented at Boise State University: a three-year, two-site, multimodal collection of data that attempted to measure the degree to which TAs were integrating our pedagogical teachings—our work within the graduate seminar; our mentoring and inservices and professional development—into their talk about and practices of teaching. We distilled our impressions into four hypotheses that many readers may find resonant with their own thinking about TA education:

H1: Formal pedagogy education positively impacts TAs' confidence, skills, and problem-solving repertoire

H2: TAs productively integrate formal pedagogy education into their daily thinking about and practice of teaching

H3: The effects described in H1 and H2 vary significantly across sites in relation to local conditions and practices

H4: The effects described in H1 and H2 differ across yearly stages, and are more prevalent and stable for second- and third-year TAs than they are for first-year TAs.

For this initial report, we draw on the survey data (N=88) and interview transcripts (N=41) to discuss our key findings. First, data suggest that our TAs were influenced more strongly by prior personal experiences and

beliefs and their experiences in the classroom than by their formal pedagogy education. Second, TAs' responses reveal that new composition principles were unevenly integrated into their composition pedagogy worldview. Third, survey and interview responses from TAs showed little differentiation between the two sites; and finally, survey responses from TAs showed little statistically significant differentiation between first-year and beyond-first-year TAs.

These results suggest that what we know about *how writers learn* is relevant to understanding the extended, recursive process that *teaching learners* go through. Even the most well designed pedagogy course is just fourteen weeks out of the life of a "senior student" (Sprague and Nyquist 295), who has been in school for at least two decades, accumulating experiences and principles regarding teaching, learning, and writing. Just as we have long known that no one writing course can inoculate college writers forever, no "one-shot" approach to pedagogy instruction ("the" TA seminar, for example) can be expected to succeed in dramatically altering students' root practices. In particular, our data support an idea articulated by teacher-mentors Angi Malderez and Caroline Bodóczyk, that new classroom teachers spend several years in an *interteaching* mode, a term that they base on the *interlanguage* theories of second language acquisition. *Interteaching* describes a stage in which a pedagogy learner is forming hypotheses about successful teaching by acting out both new and previously learned rules, testing whether those are workable in the current situation, and refining his or her practice—with varying degrees of success (Malderez and Bodóczyk 16–17). While effective teachers certainly continue to modify some practices throughout their lives, we postulate that TAs and other new teachers experience this in-between, interteaching mode quite intensely for several years, and that college-level *writing pedagogy education* (WPE) in the US needs to more directly address such an extended process of learning (see Estrem and Reid, "Writing Pedagogy Education").

While no current large-scale portrait of TAs in first-year writing programs exists, our professional sense (through scholarship and conversations at workshops, conferences, and on list-servs) is that our TA populations reflect a number of the characteristics of our counterparts across the United States. Our programs, likewise, use WPE strategies we think would likely seem familiar to many writing program administrators (WPAs), including a credit-bearing seminar, peer-mentoring, and classroom observation of new teachers. Notable similarities between our two programs include their size, their focus on master's level students, and their combination of curricular and extracurricular pedagogy education; notable differences include the year of tutoring experience for GMU students prior to classroom teach-

ing and thus the placement of their pedagogy seminar a full semester before their teaching begins.

Table 1. TA Education/Mentoring at the Time of the Study

Site Characteristics	GMU	BSU
Total Annual TA Population	24–30	28–31
Yearly Cohort	12–16 (mostly) MFAs per cohort; up to half of third-year cohort moves from TAships to non-teaching fellowships	8–11 MAs per cohort (literature, rhetoric and composition); 3–6 MFA TAs per cohort (poetry or fiction)
Teaching Responsibilities	Two- or three-year TAship <i>Year 1:</i> Writing center tutoring <i>Year 2:</i> Teach 2+2 — FYC in fall, Introduction to Literature in spring <i>Year 3:</i> Repeat Year 2 (option for one Introduction to Creative Writing section)	Two- or three-year TAship <i>Year 1:</i> Teach 1+2 FYC <i>Year 2:</i> Teach 1+2 FYC; MFA students teach FYC and creative writing courses <i>Year 3:</i> MFA students continue to teach a combination of creative writing courses and FYC
FYC curricular structure	One-semester FYC Learning-goals-based curriculum; TAs choose texts and create syllabi	Two-semester FYC Outcomes-based curriculum; course reader and syllabus outline provided to first-year TAs; TAs choose texts and create syllabi for subsequent semesters
Pre-teaching WPE (see Note 5)	Noncredit writing center education; observations of FYC class sessions with mentor; composition pedagogy seminar	Online work during previous spring and summer; eight-day pre-semester workshop in August

WPA 36.1 (Fall/Winter 2012)

Site Characteristics	GMU	BSU
First-year teaching WPE	Monthly small group mentoring and individual consultations; two WPA class observations; Literature Pedagogy course in spring	Graduate composition pedagogy seminar in fall while teaching one section of English 101; two peer class observations of others; WPA class observation.
Continuing support	Informal mentoring in third year	Informal professional development meetings twice monthly in second (and third) year; informal meetings and classroom visits with mentor TAs
TAs as mentors	May serve as mentor TAs in second and third years	May serve as mentor TAs in their second and third years

BACKGROUND AND METHODOLOGY

Measuring the effects of teacher education is difficult. Writing program administrators already understand the challenges of assessing *writing* education, an activity that at least routinely results in “good writing”: a series of stable documents that can be reasonably if not uncomplicatedly assessed by experts. The results of teacher education are notably more diffuse. They might be measured by “good teaching” as evinced by curriculum development, classroom performance, and feedback to students. Such effects can also (arguably) be assessed indirectly via student performance in authentic tasks or on standardized tests, student engagement or attitudes regarding learning, student satisfaction, and/or student retention, among other measures. Because choosing and comparing appropriate measures is difficult—and because distinguishing the effects of a specific educational program from the effects of other influences is difficult—the body of research in this area is uneven.

In composition, teacher education has been assessed via several kinds of data. Catherine Latterell’s national survey of composition pedagogy programs, for instance, leads to her recommendation that programs better integrate composition theory and classroom practica. Sally Barr Ebest’s case studies of composition TAs leads to her recommendations for increased attention to reflective writing and classroom research projects for new teachers. Rosemary Winslow’s surveys of TAs in her program provoke her recommendation that TAs write and revise more, in order to gain empa-

thy with students. Direct assessment of the results of pedagogy education, though, remains tricky.

Even in analyses of K-12 teacher education, which has a stronger research history than college teacher preparation does, the scholarship presents incomplete or inconclusive results. A 2007 meta-analysis by Pamela Kelley and Gregory Camilli, working with the National Institute for Early Learning Research, analyzes the effects that possession of a bachelor's degree had on the quality of interactions and outcomes for early childhood educators. Though they had to set aside most studies they located due to small sample sizes, they found a statistically significant positive effect for the degree-holders; however, they were unable to quantify the effect of any particular teacher-education program or approach, or to single out a particular classroom quality as improving more than others. Barbara Levin, a secondary education researcher and editor of *Teacher Education Quarterly*, finds a similar lack of consensus on the effects of teacher education. She points out that a key 1975 study by Dan Lortie, which found that teacher education principles had mostly “washed out” of new teachers’ daily practices, has not been fully updated and yet is still frequently cited in the discourse (11). Moreover, like Kelley and Camilli, she finds the data sets in these studies to be too small to support broad conclusions: she notes that most studies follow a single teacher or a small group of teachers for a year or two (Levin 7).¹ Levin does note that more recent studies designed to assess more variables have found that teachers’ development “was not smooth or linear”; such studies did not confirm the “wash out” effect (12). Overall, though, there is much data still to be gathered about teacher preparation generally, and WPE specifically.

Building on these efforts, our study (supported by two separate CWPA Research Grants) was designed to try to make visible the effects of writing pedagogy education not on *teaching*—which we might have measured through examination of syllabi, class performance, or student work—but on *teachers*. We started by assuming that one key goal of the education process is to effect change in the teachers, their goals, their concerns, and their reflective practices. Teacher educators such as George Hillocks and Stephen Brookfield have argued convincingly that teachers’ attitudes and reflective thinking practices are crucial to their successful practice. Specifically, our study was designed to elicit, in TAs’ own words, their concerns, priorities, values, and approaches to teaching writing overall, but to do so without questioning them specifically about their formal preparation to teach composition. We wanted to know how they articulated their approaches to teaching when we weren’t present and when their focus wasn’t on the pedagogy seminar; that is, we wanted to see if our educational program

had “taken root” in ways that would allow TAs to draw on it without direct prompting, as they will have to do once they move beyond our WPE program. In addition, we wanted to gather data that could be compared across time and space.

Our project includes a survey with both multiple-choice and short answer questions as well as a separate thirty-minute interview. Participants for the study were recruited from among the TA populations at GMU and BSU during each year of the study (2007–2010). At BSU, the TAs are MA students from a range of English subfields and MFA students. They participate in an intensive August orientation week and take a pedagogy seminar as they begin teaching in the fall semester of their first year; they continue to teach (on a 1–2 load) as they complete an MA or MFA program. At GMU, the TAs are mostly MFA students who tutor in the writing center and take a composition pedagogy seminar their first year, and then teach composition and introductory literature classes in their second and third years (two sections each semester). The majority of participants were enrolled in a pedagogy seminar (either for composition or for literature) at the time they completed the interview or survey: fall semesters for BSU TAs, spring semesters for GMU TAs. TAs at all levels—first-, second-, and third-year—were recruited for participation in the survey and interview protocols. At each site, TAs had the option to participate in both the interview and the survey; some TAs participated in the study in more than one year.² Tables 2 and 3 summarize some of the relevant demographic data from the surveys and interviews.

Table 2. Survey Respondents

Respondent Characteristics	GMU: 24–30 TAs annually	BSU: 28–31 TAs annually
Participation (N=88)	Spring 2007: 18 Spring 2008: 11 Spring 2009: 18	Fall 2007: 14 Fall 2008: 12 Fall 2009: 15
Age	63% 25+ years old	44% 25+ years old
Status	39% first-year TAs	78% first-year TAs
Tutoring experience	98% had worked in a writing center prior to taking the survey	32% had worked in a writing center prior to taking the survey
Teaching experience	43% had pre-graduate-school teaching or tutoring experience	27% had pre-graduate-school teaching or tutoring experience

Table 3. Interview Participants

Participant Characteristics	GMU: 24–30 TAs annually	BSU: 28–31 TAs annually
Participation (N=41)	Spring 2007: 8 Spring 2008: 8 Spring 2009: 13	Spring 2009: 4 Spring 2010: 8
Status	34% first-year TAs	42% first-year TAs
Tutoring experience	93% had worked in the Writing Center at GMU prior to being interviewed	25% had worked in the Writing Center at BSU prior to being interviewed ³
Current teaching	72% had taught at GMU prior to being interviewed	100% had taught at BSU prior to being interviewed
Prior teaching/tutoring experience	69% had pre-graduate-school teaching or tutoring experience of some kind	50% had pre-graduate-school teaching or tutoring experience of some kind

We took particular care to enable informed consent and to protect participants' confidentiality: all interaction with the TAs (including the interviews, the handling of printed consent sheets, and the distribution of gift certificates as compensation for participation) was conducted by student research assistants, who kept records that are currently held for us by program administrative assistants. In a few cases, TAs opted to give us code names that can be followed from survey to interview in a single year or from their first year to a subsequent year. Both sites used Survey Monkey to host the anonymous surveys; the interviews at both sites were transcribed by third parties, so we have had no access to identifiable voice recordings or names within the transcriptions.

Our survey (see Appendix A) included three parts: traditional demographic data questions (1–10), Likert scale questions (19–21) about how TAs ranked the value of various aspects of their experience and education as having an impact on their teaching, and short answer questions (11–18, labeled as “self-identified” here) that, since they elicited the TAs' own language to describe their thought-processes, we are using to help assess the degree to which they internalized and integrated WPE principles.⁴ The survey design and interview design shown in Tables 4 and 5 help document the relationship of the independent predictor variables to the dependent variables of self-identification, rating, and pedagogy analysis.

Table 4. Aspects of the Survey

<p>SURVEY DESIGN</p> <p>Independent Variables: Questions 1–10</p> <ul style="list-style-type: none">• Site (GMU or BSU)• Gender• Age• Program Status (1st-3rd year)• Number of previous semesters tutoring or teaching• Previous teaching experience (elsewhere)• Pedagogy courses taken <p>Dependent Variables:</p> <ul style="list-style-type: none">• Self-identified areas of Confidence in Teaching (questions 11, 13, 15, 17 on survey)• Self-identified areas of Concern in Teaching (questions 12, 14, 16, 18 on survey)• Rating of factors that increase Confidence as a Teacher (question 19)• Rating of factors that increase Skills/Knowledge as a Teacher (question 20)• Rating of factors that help with Challenges as a Teacher (question 21)

Part two of the survey—the short-answer portion—was designed to prompt respondents to begin by using their *own* words to describe specific aspects of teaching writing. For example, one survey question read:

Please list three things, overall, you are most confident about now regarding teaching writing. Next to each item, please also type a number from 1–5 to indicate the level of your confidence: 1 = “a little confident” and 5 = “extremely confident.”

Responses to these questions—in TAs’ own language—often looked like this:

Gaining classroom authority 4
Having the resources to teach confidently 4
Feeling capable of coming up with assignments 4

To analyze this portion of the surveys (questions 11–18), we reviewed these answers independently and then collaboratively to develop an initial coding system. After multiple adjustments, we developed categories for these responses. The answers above, for instance, were coded “Roles and Rela-

tionships = 4, Miscellaneous = 4, Designing Assignments = 4.” (See Appendix B for short-answer coding categories.)

The Likert scale questions of the survey named specific aspects of TAs’ formal and informal education; this enabled us to receive some direct feedback on the programmatic support and mentoring for TAs at each institution. Respondents rated factors in their preparation (such as “experience as a writer” and “reading professional articles”) to indicate the degree to which those factors increased their confidence, increased their skills, or helped them respond to teaching challenges. Data from the surveys—Likert scores and coded short answers—were then combined into a single database prior to statistical analysis.⁵ Marcia, drawing on her experience in the institutional research office at BSU, designed and completed the statistical analysis for the survey data: our primary data comes from t-tests and chi-square tests to analyze correlations among data points.

The interview questions (see Appendix C) asked TAs to identify their thought processes about various aspects of teaching.

Table 5. Aspects of the Interview

<p>INTERVIEW DESIGN</p> <p>Demographic data collected on:</p> <ul style="list-style-type: none">• Site (GMU or BSU)• Gender• Program Status (1st-3rd year)• Previous teaching experience (elsewhere)• Pedagogy courses taken <p>Narrative-based interviews were then designed to elicit insights on:</p> <ul style="list-style-type: none">• Course design process (question 7)• Class meeting preparation (question 8)• Negotiating challenging teaching experiences (questions 9–11)• Principles for teaching writing (questions 12–13, 16–18)• Areas of challenge/uncertainty in teaching writing (questions 14–15)
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The interview and survey were designed to complement each other. In the interview, participants discussed how they prepared for class and solved problems; they named their core principles for teaching writing and described where those principles came from and how they used them; they were asked also to describe a difficult teaching situation and explain how they approached it. The interview questions very intentionally did not ask for “theory” or for “best practices”; questions also did not highlight any for-

mal WPE element. The co-author from each site initially coded the interview transcripts to identify direct mention of specific ideas presented by the local WPE program, overt discussion of intuitive or past-experience-based reasoning, and specific mention of learning from peers or from classroom experience, as well as other patterns of response; we again cross-checked and collaboratively analyzed the coding and results.

RESULTS, HYPOTHESES 1 AND 2: THE IMPACT AND INTEGRATION OF FORMAL WPE EXPERIENCED BY NEW TAs

Our data suggest that TAs at both sites identify a range of influences and resources for their teaching; these include WPE-related strategies and approaches, but not primarily or consistently. We draw these conclusions from analysis of several data clusters.

Survey Results, Impact of WPE: What Fosters TAs' Teaching Confidence (Questions 19–21)

In answering the Likert-scale questions on the survey about the perceived *value* of various factors in building their *confidence*, increasing their teaching *skills*, and aiding their *problem-solving* abilities as teachers, TAs report that they place more value on their own experiences or those of peers than on the strategies they are learning from the WPE programs. For instance, TAs were asked, “Please rate the following to indicate whether/how well they have helped *build your confidence* as a composition teacher. Use a 1–5 scale, where 1 indicates ‘didn’t help much at all’ and 5 indicates ‘helped quite a lot.’” Participants were offered the following choices (with some variation across questions and sites for the question to make sense): “Experience as a writer; Experience as a tutor; Experience as a teacher; Observing other teachers and/or being mentored by other teachers; Roleplays, writing center presentations, guest- or practice-teaching; English ### [pedagogy course] practical/syllabus assignments; English ### [pedagogy course] writing/workshop assignments; Reading professional articles; Reflective writing/thinking about teaching; Discussions/exchanges with other peer teachers; Orientation or professional development workshops.” Mean scores were identified for ratings of each category in each question. The combined results from all surveys are graphed in Figure 1. (Note that because of the structure of the questionnaire, there is no comparable data in the Problem Solving category for the Roleplays and Course Writing Assignments responses.)

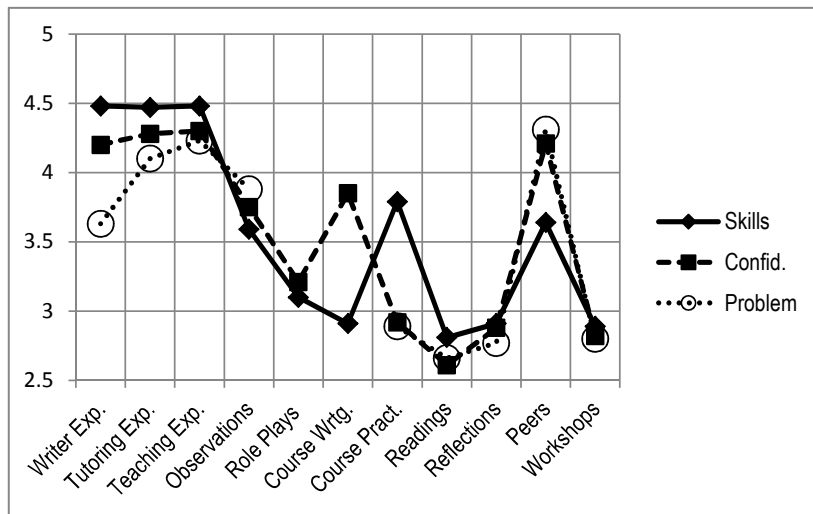


Figure 1. What TAs Value for Building Skills, Increasing Confidence, or Problem Solving: Questions 19–21

TAs' responses to the survey suggest that several key elements of formal WPE have relatively little overt value for them, particularly in comparison with the knowledge they bring with them and/or acquire on their own. As noted in Figure 1, mean scores dip below 3 for TAs' valuing of "reading professional articles," "reflective writing/thinking about teaching," and "orientation or professional development workshops" for all three questions: did this factor improve your skills, did it build your confidence, and did it prepare you to solve teaching problems. These activities, valued the lowest by our TAs, form the core of many WPE programs, including ours. Meanwhile, TAs report that they rely strongly on their own experience as writers to build not just their confidence, as we might expect, but also their skill as writing teachers. Thus the factors that they value in improving their teaching are not the ones we introduced them to, but the ones they brought with them into the program.

Survey Results, Integration of WPE: What TAs' Gain Confidence In—In Their Words (Questions 13–16)

While it is possible that the order of the Likert question options influenced the answers on the survey, possibly encouraging a downward trend, data from two other data clusters indicate that TAs not only value their formal education lightly but integrate it unevenly in their thinking about teach-

ing during their first years as tutors and teachers. First, responses to the short-answer questions reveal that TAs' vision of themselves as teachers often focuses on classroom and life management rather than issues of writing pedagogy. Two examples help reveal this trend. The responses graphed in Figure 2 and Figure 3 show the number of TAs who, when prompted to write down a response using their own language, *mentioned* a topic that fit into an area of confidence or concern that we coded for in our analysis.

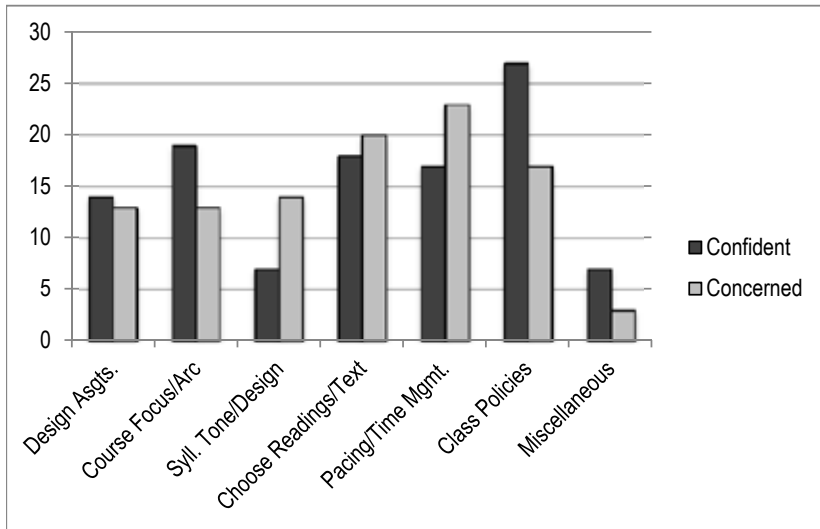


Figure 2. Confidence and Concern, Aspects of Designing a Syllabus: Questions 13–14

For example, Figure 2 shows that TAs who were asked about “Designing a Syllabus” (questions 13–14) were more likely to mention time management and class policies—as areas of both confidence *and* concern—than to mention assignment design or the overall focus and arc of the course (areas covered much more thoroughly in their graduate seminar and mentoring). On one hand, this result could indicate that their formal pedagogy education does a good job of mitigating concerns. On the other hand, concepts central to WPE (course outcomes; scaffolding for course goals; engaging students in deep inquiry, for example) don’t seem to register as either areas of confidence *or* concern. What TAs seem to most immediately indicate, when asked to do so in their own language, are areas of concern that they likely had prior to encountering WPE. (It should be noted that this survey question included the following example, which may have increased TAs’ responses: “Your answer might look like this: ‘Choosing a textbook, 3.’”)

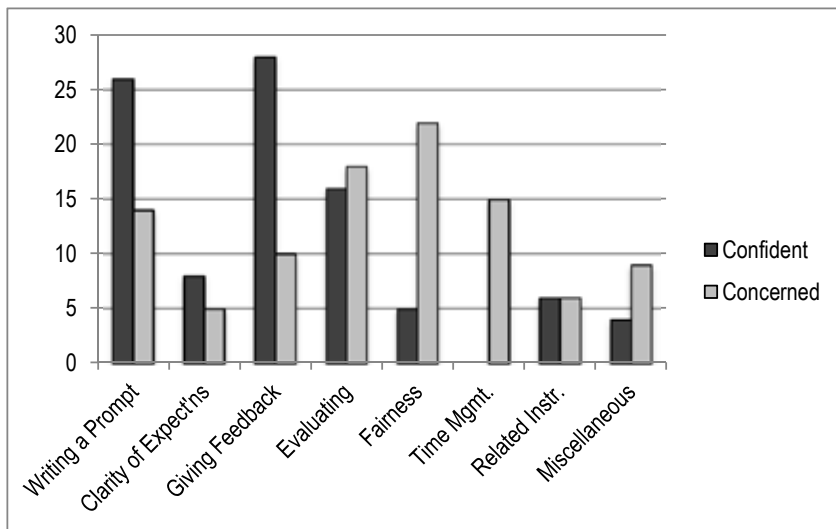


Figure 3. Confidence and Concern, Assigning and Grading Essays: Questions 15–16

Figure 3 similarly shows TAs' responses to questions about their confidence in "assigning and grading student essays." While the pattern of responses to this question includes strong and mostly confident responses for "writing a prompt" and "giving feedback," two situational issues must be accounted for. The survey question suggested, "Your answer might look like this: 'Writing an assignment prompt, 3,'" which may have influenced the responses. (An earlier survey question had included the model answer "Keeping up with grading, 3," which may also have affected responses to these two questions.) Also, nearly all of the respondents from GMU had already spent at least a semester tutoring in a writing center; it is difficult to tell whether their responses about giving feedback are experienced-based or formal-education-based. But beyond those responses, participants frequently mentioned issues about fairness and time management that many TAs bring with them into their WPE programs. Although a few responses to these questions demonstrated a more composition-studies-informed understanding of syllabus design and grading—such as "Providing the right amount of comments" (meaning: the amount that will be most effective for the student)—most were too brief or general ("time management") for us to read them as indications that these TAs are considering specific, WPE-informed visions of what writing teachers do.

Interview Results, Integration of WPE: Where TAs' Teaching Principles Come From and How They Make Decisions

The interview participants (some of whom may have taken the survey, although the survey and interview participant data are not linked) also gave answers not directly attributable to WPE. For example, when addressing the structured interview questions about how they design syllabi and how they prepare to tutor or teach a session (questions 7–8), TAs at both sites make occasional reference to recognizable composition principles. Yet they most often discuss their plans in language too vague to directly link to the formal education we provide. One TA from BSU emphasizes procedure and expectations: “[For me it’s] just kind of laying down what I expect from the students in the course up front, at the beginning, outlining everything that I expect them to get from the course, that I expect to give them, and that I want them to get from me.” A GMU TA explains her class preparation this way: “[It’s about] thinking about class materials. It’s thinking about my past experience, my own college experience.” She mentions drawing from her peers, thinking about her own writing process, and finally considering the “materials we’ve read, the things we’ve discussed in [the pedagogy seminar].” Like many of the TAs who participated in the interviews, this person’s worldview seems to have a relatively small space for “things we’ve discussed” in the formal seminar.

The picture shifts the most when TAs are asked in the interviews to name their principles about teaching writing—and then to identify where those principles come from (questions 12–13). In these responses, learned composition or teaching principles are named more often than in other places in the interview, though their mention is often entwined in discussions of prior knowledge and experiences, of previous teachers and current peers. TAs at both sites still often describe principles based on long-internalized (and sometimes very general) interpersonal values: “I don’t really know if it’s a principle, but I guess [mine is] ‘whatever it takes to get the job done,’” notes a BSU TA. A GMU TA explains that having a “de-centered classroom” is a value for her because “that’s the environment in which I learn best and I write best so I’ve decided to adopt it as my own.” Many explain generally how they want to be “generous,” to try to “make students comfortable,” or to use group work. Our impressions suggest that these principles are not at odds with the composition pedagogy we present to TAs in our seminars, but the data are not conclusive enough to distinguish these responses as resulting from our interventions rather than being ideas that the TAs brought with them from past learning experiences.

Further, when we do find clearer traces of our instructional work, they are often positioned by the TA in a secondary or afterthought comment. Several TAs do identify the influence of a particular professional resource like the article about “under culture or whatever . . . [that] seems like it’s disruptive but it’s actually . . . positive” (a reference to a Robert Brooke article by a GMU TA). Interestingly, though, in the interviews they most often mention their personal experiences *first*, and describe how learned principles help name or back up what they already believe. For example, when asked to identify where her principles come from, this GMU TA explains:

[they come] from how I learned as a writer . . . [the] investigative process, I think, definitely came from *how I was taught* and the *textbook that I used* was written by my undergrad professor so it was all in that kind of analytical investigative language. . . . The creative aspect comes from *my own creative work* . . . you know, as a poet that’s also what I do. I work from sources I research so I think *part of it comes from myself as a writer* and *part of it comes from my background as far as like how I was taught* and *then, of course, the work we did in pedagogy as well and considering different theoretical approaches helped me to kind of round that out*. Like I knew I would be process centered from the very beginning, but those kinds of conversations with my peers help to kind of form a better picture of how I might do that (emphasis added).

Even though WPE is visible within this TA’s response, she frames the pedagogy course as helping her “round out” her principles rather than as influencing or even creating them, a trend in many responses.

When we ask TAs in the interviews to step back from naming their principles and just tell us a story—to describe a “tricky, difficult, or surprising situation you encountered recently related to teaching writing, either in class [while tutoring] or regarding a writing student [client]” (question 9)—the responses move even further from the composition-studies focus of our WPE programs. Relatively few TAs choose to identify a curricular problem or a challenge in teaching or learning *writing strategies*. Instead, they more frequently describe the problem in terms concerning a particular student or group of students who challenge TAs’ pedagogical success, personal authority or interpersonal management skills. We identified fourteen of the forty responses to this question (35%) as accounts of challenges with pedagogy—of a classroom lesson gone awry or an approach that worked differently than anticipated (see Table 6). However, we coded twenty-six of these accounts, a strong majority, as being about various aspects of working with students, and not often about working with them on their writing: a

student whose religious values are affecting classroom discussion, a student who claims to have turned in work but hasn't, and several students who resist course work. Challenging or tricky situations for these TAs are about negotiating personal boundaries, holding students "accountable" for doing college-level work, or working to understand resistance, more than about the writing pedagogy decision-making process we hope they are learning. (For a much more in-depth analysis of these and other interview responses, see Estrem and Reid, "What New Writing Teachers Talk About.")

Table 6. Types of Difficult Teaching Situations

Theme	Number of responses (n=40 ⁶)	Characteristics
Pedagogy-centered	14	These accounts position <i>teaching</i> events (class organization, working with readings) as the key challenge.
Student-centered		These accounts focus on the challenge of how to address the more general interpersonal arenas of teaching, manage teacher authority, and negotiate a range of student behaviors.
Responding to resistance	14	
Negotiating boundaries	7	
Holding students accountable	5	

Summary of Results: Impact and Integration of WPE

Like other researchers in teacher education, we find it challenging to draw conclusions from limited data, or to conclusively explain the causes for what we *don't* see. While the Likert questions about factors that build confidence and skills demonstrate that TAs often rate their previous and ongoing experiences as more valuable than the formal learning we provide them, the short-answer and interview responses reveal only that familiar elements of formal WPE—attention to assigning and responding to writing, to principles of rhetorical theory and writing-learning, to reflective practice—aren't always articulated or prioritized in TAs' framing of their work. The interviews offer glimpses of TAs with an uneven set of resources and a tendency to locate teaching challenges in people rather than in pedagogical approaches (perhaps making these challenges easier to dismiss as intriguing aberrations or to solve based on prior knowledge). Overall, while the data do not indicate that TAs are ignoring or acting counter to composition pedagogy principles, our data do suggest that the very specific infor-

mation we bring to TAs still occupies a limited and sometimes peripheral position in their daily thoughts and practices regarding teaching writing. Since these results seem to run counter to our first two hypotheses about the effectiveness and integration of formal WPE, we have changed the way we view our own teaching, as we discuss further below, and we highlight the results here for other writing pedagogy educators to consider as they review their TA education programs.

RESULTS, HYPOTHESES 3 AND 4: DIFFERENCES AMONG SITES AND TA STAGES

The third hypothesis our study was designed to test proposes that TAs and their responses to their education differ substantially from one site to the next, thus necessitating significant local modifications to writing pedagogy education. And our fourth hypothesis proposes that first-year and beyond-first-year TAs are affected by and integrate WPE differently, perhaps demonstrating greater valuing, application and/or integration of composition studies principles after the first year of teaching. However, our data and analysis reveal very few differences along these axes of comparison among the TAs we surveyed. (For complete data for the statistically significant results, please see the tables in Appendix D.)

Comparing Two Sites: Likert-Question Analyses (Questions 19–21)

T-tests were run on all of the confidence/skill/problem-solving Likert responses (questions 19–21) to determine differences between GMU and BSU TAs. The following are the only statistically significant differences ($p < .01$) on these questions among over thirty possible points of comparison:

BSU TAs value discussions with peers more than GMU TAs for confidence building: $t(73) = -2.81, p < .01$

BSU TAs value discussions with peers more than GMU TAs for skill building: $t(73) = -4.62, p < .01$

BSU TAs value reflective writing about teaching more than GMU TAs for problem solving: $t(72) = -4.17, p < .01$

That is, the mean scores denoting valuation of these elements were higher at statistically significant levels in the BSU responses than in the GMU responses. We have no clear interpretation of these results based on comparing the characteristics of the two programs. Shelley's *impression* of the GMU TAs, for instance, is that they formed a very tight and supportive cohort and valued each other's input. Moreover, the results do not correlate

with key differences we assumed would affect TAs' responses to our programs: the prevalence of creative writing students with tutoring experience at GMU might have led those TAs to value writing or teaching/tutoring experience more highly, while the intensive summer workshops in place at BSU might have led them to report higher values for that factor. However, no statistically significant differences were found to support either of those assumptions.

Comparing Two Sites: Self-Identified Responses (Questions 11–18)

Statistical analysis of all the short-answer questions was limited by having much smaller numbers: in a few cases, as many as twenty-five or thirty responses accumulated within a single coding category, either as a concern or as a point of confidence, while in other cases, only five or six responses fit a category. (Remember that we had coded responses into categories and counted the number of times a particular category was mentioned as either an area of confidence or an area of concern.) The following were the only statistically significant differences between sites found from over 60 chi-square analyses of the four pairs of short-answer questions:

GMU TAs mention confidence about designing an assignment prompt more than BSU TAs in the overall inquiry about teaching (question 11): $\chi^2(1, n = 12) = 6.15, p < .05$

GMU TAs mention confidence about class preparation and management more than BSU TAs in the overall inquiry about teaching (question 11): $\chi^2(1, n = 31) = 6.39, p < .05$

BSU TAs mention confidence about conferencing and providing feedback more than GMU TAs in the overall inquiry about teaching (question 11): $\chi^2(1, n = 31) = 7.49, p < .01$

GMU TAs mention confidence in choosing a textbook/readings more than BSU TAs in the inquiry about designing a syllabus (question 13): $\chi^2(1, n = 18) = 4.47, p < .05$

GMU TAs mention confidence in giving class lectures more than BSU TAs in the inquiry about designing class meetings (question 15): $\chi^2(1, n = 6) = 6.37, p < .05$.

GMU TAs mention concern about organization and course pacing more than BSU TAs in the inquiry about designing a syllabus (question 14): $\chi^2(1, n = 23) = 4.84, p < .05$

GMU TAs mention concern about engaging students more than BSU TAs in the inquiry about designing class meetings (question 16): $\chi^2(1, n = 9) = 6.01, p < .05$

As we discuss in more detail below, the implications of even these few differences are hard to determine. TAs at GMU are taught specifically how to design an assignment because common prompts are not provided, though Shelley's sense had been that they felt ill-at-ease rather than confident about this part of their work. Meanwhile, the BSU TAs exhibit a confidence about conferencing and responding to student work that eclipses that of the GMU TAs, although the latter spend a full year learning about conferencing and responding as writing center tutors. Generally, though, that sizeable difference in our WPE programs—GMU's year-long preservice WPE involving tutoring, observing, and a seminar vs. BSU's two-week preservice workshop and semester-long seminar—does not seem to have had a measurable effect on TAs' expressions of confidence or concern; neither does the difference between having to design a syllabus independently (GMU) and drawing on a common course syllabus (BSU) measurably affect these responses.

Comparing First-Year and "Experienced" TAs: Likert-Question Analyses (Questions 19–21)

The comparisons between first-year and beyond-first-year TAs also revealed very few statistically significant differences. In the Likert question analyses regarding skill building and problem solving, "new" first-year TAs had higher mean scores on all of the factors, valuing everything more highly than "experienced" beyond-first-year TAs; perhaps that is due to the enthusiasm and/or optimism of brand new teachers. No statistically significant differences between levels of TA experience were noted for any of the confidence-building factors. Among responses to the skill-building and problem-solving questions, the following are the only statistically significant differences between how new and experienced TAs valued contributing factors:

Experienced TAs value teaching experience more than new TAs for skill building: $t(63) = 2.02, p < .05$

New TAs value practical course assignments more than experienced TAs for skill building: $t(37) = -2.23, p < .05$

New TAs value all course assignments more than experienced TAs for problem solving: $t(61) = -2.08, p < .05$

New TAs value information from reading articles more than experienced TAs for problem solving: $t(70) = -2.28, p < .05$

New TAs value reflective writing more than experienced TAs for problem solving: $t(71) = -2.66, p < .05$

Some of these results align well with our impressions about teacher preparation: experienced teachers value their experience, while new TAs (who at each site were taking the survey as they completed their pedagogy seminar) value the course assignments, articles, and reflective writing they're engaged in more than the experienced TAs who likely have fewer encounters with such resources after completing their required seminar. The absence of any statistically significant differences between what first-year and beyond-first-year TAs value for building confidence interests us, though. Are "experienced" TAs still drawing confidence from what got them through the first year, without developing new resources? More importantly, an inoculation model of WPE suggests that we should be able to measure many points of significant difference between novice first-year TAs (all of whom are taking the survey before they complete their first semester of teaching or their first pedagogy course) and experienced TAs who have been thoroughly certified to teach writing, yet our data do not support such a conclusion.

The thinness of quantitative results about differences between new and experienced TAs is echoed by the results for the only TA whose voluntary code-name participation ("Maggie") allows us to compare surveys from her first, second, and third years. From over thirty points of comparison across the Likert questions, Maggie's responses differ by more than a point on only twelve questions: where, for instance, a first-year response values a factor at "5" while second- and third-year responses value it at "3." Moreover, only four sets of those higher differential responses suggest a kind of progression or growth. Maggie values her *teaching experience* much lower for all three questions in her first year, when—as a GMU TA—she had tutored but not taught writing, and she values her own *writing experience* higher as a first-year TA for solving problems (as a tutor of writing). The other eight sets of responses are too mixed to suggest conclusions about progression or regression.

Comparing New and "Experienced" TAs: Self-Identified Responses (Questions 11–18)

In comparing first-year to experienced (second- and third-year) TA short-answer responses, even fewer clear differences emerged. The following were the only statistically significant differences attributable to TA stages of learning we found:

Experienced TAs mention confidence about preparing and managing class sessions more than new TAs in the overall inquiry about teaching (question 11): $\chi^2(1, n = 30) = 6.45, p < .05$

Experienced TAs mention confidence about leading class discussions more often than new TAs in the inquiry about designing class meetings (question 15): $\chi^2(1, n = 16) = 4.54, p < .05$

Experienced TAs mention confidence about giving feedback more often than new TAs in the inquiry about grading student writing (question 17): $\chi^2(1, n = 27) = 4.70, p < .05$

Among all the data analyses, this set of results perhaps surprises us the most: not because the three statements above confuse us (they don't!), but because *only* three of more than sixty tests show statistically significant differences in the confidence levels of first-year and beyond-first-year TAs. If TAs' teaching principles or their confidence about teaching writing are not measurably affected in a two- or three-year WPE program, we wonder what we can claim as the effects—as valued by the TAs or as visible in their integration of new ideas—of all of our hard work.

Comparing Sites and TA Stages: Interview Analyses

Within the interviews also, no significant patterns have emerged related to location or to experience within the program. While the numbers are too small to allow quantitative analysis, we can look for trends and patterns. Perhaps it is noteworthy that in response to the prompt to tell a story of a surprising, challenging, or tricky situation, three narratives which we identified as revealing a “reflective-practitioner” stance came from second-year TAs, but the numbers are too small to let us draw strong conclusions. Meanwhile, TAs with prior teaching experience, second- and third-year TAs, and first-year TAs all tell accounts of “this student who . . .” in high numbers. When naming their beliefs and accounting for the origins of those beliefs, TAs likewise demonstrated no patterns of variance across experience levels. Between the two sites, the only real differences relate to the general context of the two sites (e.g., many more GMU TAs discuss experiences as writing center tutors, because they all tutor during their first year).

Summary of Results: Comparing Sites and TA Stages

It is possible that our limited conclusions here are a result of limitations in our methodology. For instance, interviews comparing instructors in their *first weeks of teaching* and *last semesters of teaching* might capture specific,

differing patterns of response. Additionally, a survey that included larger numbers overall, larger numbers of beyond-first-year TAs, TAs with a wider range of educational foci, and/or TAs with more experience (four, five, or six years in the classroom) might have revealed more points of divergence. Currently, though, the results of the data we gathered directly question whether differences between first- and second-year TAs and differences between this local WPE program and that one should be dominant factors in discussing the impact of WPE on graduate TAs. Our data suggest instead that input from many other factors—TAs' reliance on previous experiences, their trust in their personal skills and peer input, their concerns about challenging students—influences first- and second-year TAs, east-coast and northwest TAs, defining them at least as much by their similarities to one another as by their differences.

DISCUSSION: HOW DO TAs THINK ABOUT AND USE WPE?

We remain convinced that the TA participants at both sites could have, if prompted directly, connected some of their teaching plans or practices to specific readings, assignments, or principles from their pedagogy education, using language that we would all recognize as emerging from the study of composition theory and pedagogical theory. If they had been pressed specifically for responses concerning the challenges of *teaching or learning writing skills*, our TAs could have identified and thoughtfully discussed relevant issues, learning goals, or pedagogical options, as they do regularly in class discussions at both sites. We also stand by our professional *impressions* that TA participants' syllabi, assignments, responses to student writing, and classroom practices drew heavily on the guidance and materials we presented to them. Finally, we're convinced—as were our TAs—that they became better teachers as they gained knowledge and classroom experience in teaching writing, despite the one-shot nature of much of our WPE. However, we must account for and address our data: when we review our TAs' responses to less direct questions, we see only inconsistent glimpses of our formal WPE teaching rather than the steady composition pedagogy-informed thinking that they reflect to us in seminars and conferences. Our new teachers see writing education often, even predominantly, through a lens of student management rather than composition pedagogy; they continue to explicitly value their own lived experience more strongly than the knowledge or skills we focus on with them; and they infrequently use language or mention concepts that we can identify as coming from our programs. In other words, the data we *didn't* find thus suggest the need for a

more complex understanding of causation and learning regarding writing pedagogy education.

Impact and Integration of WPE: Not a TA “Resistance” Problem

We believe it is important, in analyses of our data, not to move too far into focusing on our students’ limitations. Thus we want to complicate a possible reading of our results as reinforcing a common assumption about TAs’ “resistance” to “theory” (see Belanger and Gruber; Ebest; Fisher; Hesse; Stancliff and Goggin; and Welch, among others). It’s true that “reading professional articles” scored at or near the bottom of what these TAs valued and that mentions of specific pedagogical or composition studies concepts were infrequent in the interviews. However, the “resistance” we see in our data may be more inertial than consciously directed: we may simply be seeing TAs rank the least familiar and most abstract factors lowest among things they can rely on in helping them feel and act like confident teachers. Indeed, we expect that few experienced writing faculty would say that new-and-complicated ideas, tools, or approaches are the ones we usually turn to first when we need a confidence boost or are trying to solve an immediate problem.

The process of making new knowledge seem as useful and reliable as older knowledge can be complicated and recursive, as Robert Parker notes:

[L]earning involves a movement from experience to the personal viewpoints we construct, the result of which is personal “theory.” Occasionally, we encounter “THEORY,” those more formal and abstract hypotheses about how large segments of the world work, or why they work as they do. We can make THEORY of this order a part of our world view only in relation to the personal theory we have already constructed. So, from experience we construct a “theory,” in use, and then move from its practical, ready-made hypotheses to the experts’ hypotheses (THEORY), and back. (413–14)

A first step, as we saw in several of the interviews, is collecting THEORY that matches *theory*: “[I’ve been] thinking about the materials that we’ve read,” reported one GMU participant, “. . . and pulling out elements that feel appropriate to my own beliefs and my standards.” If new TAs are to make the second step—using THEORY to *revise and expand* personal theories, rather than simply confirm them—they will need more time and opportunity. We cannot endow our TAs with new theory by giving them a pedagogy class; they must appraise and integrate new knowledge themselves.

Impact and Integration of WPE: No Magic Wands

We find it reassuring that participants found the “practical” elements of the pedagogy courses immediately valuable in building their teaching skills; the lower valuing of such assignments in the *skills* and *problem-solving* categories seem to connect to the pattern of TAs framing their teaching and problem solving in terms of individual, challenging students. We are interested in thinking more about why the writing and workshop assignments were valued somewhat more for building TAs’ *confidence*. Are we mostly reinforcing a confidence they already draw from their writing abilities and experiences, or adding a new support? And we are intrigued by how, when, and why WPE-related ideas are mentioned when TAs are asked to identify the origins of their beliefs about teaching writing: WPE figures into their thinking, although often as a way to confirm what they already believe. Generally, though, our formal education efforts are not very apparent in the data we have gathered. To be sure, we had not expected to find dramatic results, given all the complications of “value added” educational assessment, but we had hoped for more evidence of our educational impact than we found.

In coming to terms with our data, we have found ourselves pulling back the curtain of the powerful pedagogy seminar and deciding that we may yet be good teachers but just very bad wizards. Like legions of FYC teachers, we do not have the power to fully transform students in a single seminar at the beginning of students’ intensive graduate study and practice. Research on teacher change supports this analysis: for instance, Margaret Vaughan’s study of 100 public school teachers leads her to this conclusion about the pressures and opportunities necessary to induce change:

[F]or a description or rule [often presented in a workshop or class] to change behavior, a teacher must already be able to engage in the behavior and must find the consequence for doing so reinforcing. To generate new behavior, a teacher requires . . . individualized instruction, . . . artificial antecedents [required in-class routines] or . . . artificial consequences. (125)

Jo Sprague and Jody Nyquist, drawing on decades of research about how students and professionals gain competence, suggest, in addition, that novices follow a staged developmental process, along spiraling, recursive paths of increasing competence (unconscious incompetence, conscious incompetence, conscious competence, unconscious competence) or along paths of increasing flexibility (looking for one best model, being open to alternate approaches, drawing from several models, creating and combining models) (297–301). Moreover, they argue convincingly about the need for new TAs

to work on a few skills at a time, gaining confidence in those before risking new approaches (Sprague and Nyquist 298). These strategies for preparing new teachers run counter to some of the pressures placed on writing pedagogy educators to quickly and efficiently “cover” everything a new TA needs to know to succeed; we come back to these models with renewed appreciation after seeing how small the measurable gains that our TAs demonstrated were, even over two or three years.

Additionally, the literature on transfer and learning encourages us to take a broader view of the complexity of applying knowledge from one context (in this case, the graduate pedagogy seminar) to another (the FYC classroom). John Bransford and Daniel Schwartz’s review of the literature on transfer includes a summary of Harry Broudy’s conception of learning—a conception that includes “‘knowing that’ (replicative knowledge) . . . and ‘knowing how’ (applicative knowledge)” but also, importantly, emphasizes “knowing with” (10). They write, “By ‘knowing with’ our cumulative set of knowledge and experiences, we perceive, interpret and judge situations based on our experiences in the past” (Bransford and Schwartz 10). So of course TAs’ prior experiences and social networks figure prominently in their approaches to and decisions about teaching. (And as Dylan Dryer’s research demonstrates, TAs’ prior *lack* of knowledge and confidence—about academic writing strategies, for example—also continues to strongly frame their work with students.) But as TA educators, we face the persistence of the common models of college WPE, all still tightly focused on the first year or even the first semester of teacher education, combined with institutional pressures to certify our TAs as “ready to teach” without additional resources, and so we have tended to overlook such complications.

Sites Of WPE: It’s Not (Necessarily) a Local Phenomenon

The replication of this study across two sites allowed us to consider what difference the local culture, FYC pedagogy, and WPE structure has on TAs’ views of themselves as teachers. Where we found significant differences, though, the results were as often puzzling as sensible. On one hand, the BSU TAs who took their pedagogy seminar as they were first teaching quite reasonably valued *reflective writing* (of the sort they did in that seminar) for *problem solving* about teaching more than GMU TAs, who did little guided, reflective writing once they started teaching, a contrast that agrees with our impressions about local influence. On the other hand, the GMU TAs who had had a year of experience tutoring in a writing center were unexpectedly less likely than the BSU TAs to mention confidence about *conferencing and providing feedback*. Likewise, while the GMU TAs

who were responsible for designing their own syllabi did not surprise us by mentioning *organization and course pacing* as a concern more often than their BSU counterparts who worked from a common syllabus outline and text, we were intrigued that they expressed more confidence about *choosing a textbook and course readings*. It's possible that our two sites and WPE cultures are simply not different enough to register in our TAs' reported self-concepts and teacher-talk. Yet it seems equally possible that the commonalities among people who choose to get a master's degree in English in the US—along with the limited impact overall that a year's worth of WPE appears to have on TAs in this study—serve to mitigate any moderate differences between programs. Adaptation of WPE to local needs and cultures, while perhaps important for other reasons, seems to have less effect on what TAs value, gain confidence about, and integrate into their teaching and teacher personae than our previous conversations about program design have acknowledged.

Stages of TA Learning: No Quick Competencies

In designing this study to include TAs from their first year to their third year of teaching, we thought we had built enough time and opportunity into the study to be able to see TAs increasingly demonstrating the impact and integration of their formal WPE.⁷ The few changes we do see make sense: first-year TAs value elements of the pedagogy seminar a little more than their more-senior peers do, while beyond-first-year TAs value their newly acquired teaching experience more than their novice peers. More-senior TAs mention feeling confident a little more often than novice TAs do. The sparseness of statistically significant results, though, suggests that even third-year TAs have more in common with their novice peers than they have differences: our results suggest not that WPE lessons have “washed out” over time, but that they have not yet fully taken root. After all, even third-year TAs are still new learners: they inhabit an interteaching stage in which they are drawing heavily on the rules from their “first language” of teaching—what they observed as students—while looking for ways to accommodate their “second language” compiled from the perspectives, principles and strategies offered by specific composition pedagogy. Moreover, it's important to remember that our TAs are self-selected and externally selected to produce a cohort of already capable teachers: they are interested in and talented at solving writing problems, and many have both an interest in teaching “English” and empathy for students in a college setting. Like FYC students, they aren't blank slates; we are invested in making

them *better* rather than making them *adequate*, a much smaller leap to try to measure.

The cross-stage data do give us additional reasons to consider why and how we might focus and extend WPE. It's possible that TAs value formal pedagogical education more not just when they're novices, but *while they are participating in it*. In that case, ongoing formalized participation could help TAs deepen their valuing of "theory" and new disciplinary strategies. Continued access to guided educational moments might provide the interruption, the call to reflection and *ongoing* metacognition that have been found to enable transfer. Importantly, both our quantitative and our qualitative data suggest that TAs aren't gaining confidence in their teaching as dramatically as we had hoped (and as they had suggested to us). If we were to officially extend the process of certification beyond the first year, we might better convey to TAs our conviction that learning to teach well takes time, is a draft-and-revise process, and entails ongoing adaptation to new circumstances—just as a multi-stage or writing-across-the-curriculum based writing education program conveys an extended, recursive writing-learning process to undergraduates. In a more extended educational process, TAs like one from BSU who found it "kind of frustrating just not being perfect" might feel less pressure to solve problems and happier to explore possible solutions. Finally, as Sprague and Nyquist argue, some of the pedagogical learning may be more effective once TAs have moved some teaching knowledge to "unconscious competence" and so are no longer struggling as much as they did in their first year(s) of classroom teaching. We may find more openings for discussion of genre-based instruction or effective commenting strategies once new teachers have gained confidence managing their students and their classrooms.

CONCLUSIONS

We emerge from this study still persuaded that formal WPE in university composition programs can be effective. We acknowledge the possibility, revealed by our data, that TAs like the ones who participated in our study are surviving as early-stage composition teachers by relying primarily on what they learned before they met us. Yet we conjoin our educated local impressions—that our TAs deliver better writing classes with our guidance than without it—to our data and to our newly intensified understanding of the pedagogy learning process as lengthy, initially partial, and recursive. We thus conclude that WPE programs are on a reasonable track that needs adjusting and expanding rather than overhauling. Writing pedagogy educators can be important and successful guides to the profession: we can help

students become not just better teachers but better *teaching learners*. But to be more successful at this over a long term, we need to shift our goals and expectations—and those of our students.

Impact and Integration of WPE Principles: Teaching For Transfer

First, we recommend that pedagogy educators teach explicitly for integration and transfer of new material, as well as for increased reflective problem-solving, rather than for knowledge of the field or even full competence as classroom practitioners. We have evidence that our TAs *can* and *do* incorporate at least some of what we teach them, well enough that they recall it (if sometimes belatedly or partially) in discussing and responding to teaching problems. A key to better WPE may be to teach directly toward that kind of integration and application of core principles. Malderez and Bodóczky's image of new teachers as "icebergs" helps us imagine our students as affected lightly at the top by the climate of formal education while they are driven forward by the interactions between a massive core of personal experience and the undercurrents of culture and society (14). TAs may thus need more direction to learn how to link limited amounts of new knowledge to their strong previous knowledge, in such a way that both remain accessible to them as practicing teachers. Shelley's suggestion that "The time we spend covering 'just a little more' theoretical or practical information may devour the time we intended to provide for reflection on and discovery of related questions" (Reid 16) becomes even more relevant to pedagogy seminar design if reflective work is co-requisite to any long-term learning.

For example, if TAs see their own writing experience as a key source of confidence and skill, we could invest time in assignments and activities that help them connect new ideas about writing education to those writerly experiences (pulling new information down into the iceberg); we could also help them articulate what they know as writers—and, as Dryer suggests, how they can apply it, or may need to adapt it, to the work they do with FYC students, thus pulling previous experiences up to the iceberg surface (442–43). Similarly, if what we want is for TAs to deliberately use what they learn in a pedagogy seminar as they move into their own classrooms, we need to directly model and assign them that kind of informed practice, both before they teach and as they begin and continue teaching. In particular, if we want TAs to solve teaching problems in part by reflecting on and critically applying concepts from composition research and scholarship, they need practice in becoming those reflective, critical practitioners. While Sprague and Nyquist argue that an increase in "unconscious competence" is one sign of the progression from novice toward proficient practitioner

(296–98), we do not want TAs to move too quickly or completely to a nonreflective stance. Beyond the controlled spaces of the pedagogy course, reflection may disappear if it does not become a familiar practice, one that teachers deem valuable.

Stages of TA Learning: Extending WPE Across Several Years

Reflective practice is just one of the ways of being a writing teacher that needs reinforcement throughout TAs' extended interteaching stage. Our second recommendation thus is not only that WPE would be somewhat better if it continued across multiple years; that is a premise most pedagogy educators would agree with. Instead, we argue more strongly: given data that reveal so few differences between first-year and beyond-first-year TAs, a program of regular, formal, directed pedagogy education *must* continue beyond the first year if we hope to have any substantial, lasting effect on how TAs teach and think about teaching writing.

This recommendation also goes further than a general understanding that all teachers need continuing opportunities for learning and reflecting. Our TAs particularly need and will benefit from continuing structured learning because they are new teachers: they are still in an unsettled and receptive learning mode, and they struggle with both overconfidence and frustration at “not being perfect” if they assume that they have been certified as fully competent teachers. Moreover, many of the professional positions they are hired into after graduation will not be conducive to further learning about teaching writing. To be sure, the peer discussion groups and additional workshops we already provide will support this WPE extension: our data reveal that TAs value and integrate knowledge provided by their peers and by practical workshops, so TA education should continue to be multimodal. Yet our data suggest that those incidental learning experiences are insufficient to have a long-term, transformational effect on new TAs. In addition, our TAs may need more extended, structured learning because they are new teachers *in and of composition*. We value their success as teachers because our scholarly field is firmly rooted in the development of theorized pedagogy designed to maximize active student learning, creativity, critical thinking, flexibility, reflective practice, and collaboration. More than that, though, we require their success because of our field's commitment to pedagogical outreach: if good writing pedagogy is created in the field but nobody outside the scholarly echelons of the field knows or reflectively uses it, the value of our work diminishes.

We can choose to leave fewer of these pedagogical changes to chance, hoping that new teachers will sometimes remember “some things we dis-

cussed”; instead, we can more directly assist and intervene while TAs’ habits of mind and action—including the ones that will provoke and enable them to continue learning about teaching as they mature—are still forming. Thus an extended education program, like the initial efforts, should include structured assignments that require TAs to further integrate, connect, and reflect on a range of pedagogies, their own and those of specialists in the field.

Sites of TA Education: Additional Data Needed

Finally, because our data show so few differences between TAs’ responses at our separate sites, we conclude that a majority of WPE programs—regardless of local conditions—need and would benefit from extended, transfer-focused pedagogical education programs. Your TAs and WPE program may differ in many ways from ours, but our data strongly suggest that as a field, we all need to move beyond seeing the inoculation method as officially sufficient, and need to ensure that all participants have the opportunity to realize returns on the intensive investment of our pedagogy education efforts.

But don’t take our word for it. Go gather data—not just impressions—from your own TAs, based on the kind of defined model we have designed for this study shown in Tables 4 and 5. What new (or old) learning do they value? How do they talk about teaching when you’re not in the room? To what degree do they change as they move beyond their first year of teaching? How do their responses differ from those of the TAs we studied? You may find such data helpful in arguing for resources to extend WPE to the point at which it is having lasting effects on your composition teachers. Beyond that, though, the answers to these questions, and the actions we take in response, are crucial for the field of writing education. If we are sending incompletely educated TAs out to teach composition—at research-intensive and teaching-focused state universities, at small liberal arts colleges and community colleges and high schools, to teach one writing course a year or six per semester—then we are letting slip a key opportunity in the larger effort to improve writing education. The more we learn about how complicated and important learning to write is at all levels, and the more colleges and universities face pressure to teach and assess writing with inadequate resources, the more it becomes clear how much we need confident, mature, reflective composition teachers representing us—and extending our scholarly reach—at all levels. And to ensure that representation, we need a more intensive cycle of data-driven program assessment leading to curricular and co-curricular improvement of writing pedagogy education.

Do we know the effects that writing pedagogy education programs nationally have on the teaching assistants in them? Not really? Then for the sake of the TAs, their students, and the field of composition, it's time to find out.

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NOTES

1. As one example, consider Smagorinsky, Wilson, and Moore's recent *English Education* article about learning to teach writing and grammar, which explores the consequences of limited or absent WPE by following a single teacher through her first two years of teaching.

2. Note that these questions were asked slightly differently on the interview script and the survey, and so the resulting background information is also slightly different here.

3. Due to a procedural error, five participants were not asked about this question at BSU; in calculating this number, their answers were recorded as "No." Heidi reports that the percentage here resembles the overall trend in her program.

4. As an adaptation to local conditions, some of the Likert questions were re-worded on the BSU survey so that participants could identify the *kind* of experience accurately even though it is named differently or discussed in different terminologies at each site. In hindsight, having now analyzed the data, we would have changed some of the survey design to ensure greater consistency among questions and across sites, and to provide directions that were even less likely to influence participants' answers.

5. The numerical rankings for the short-answer questions, designed to indicate intensity of confidence or concern and provide another possible measure of development, subdivide the data to the point at which finding statistical significances would be unlikely, especially given the lack of significant differences in the larger categories. A more qualitative analysis of these indicators is a matter for a future analysis.

6. One TA couldn't think of an account of a difficult teaching situation.

7. The "first-year" TAs at GMU and BSU aren't exactly parallel, though TAs at both sites participated while taking their composition pedagogy seminar: GMU first-year TAs participated during their second semester of tutoring but

before they moved to classroom teaching, while BSU TAs were completing their first semester of teaching a single composition course. Similar differences exist in the “beyond-first-year” categories. However, all first-year TAs participated as the bulk of their formal WPE was coming to an end, and all other TAs participated while at a stage where they were considered by program standards to be no longer in need of direct education.

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APPENDIX A : SURVEY QUESTIONNAIRE

1. (Question 1 is the Informed Consent check-box.)
2. (Question 2 provides an option to give a trackable Code Name.)
- 3–10: Questions 3–10 ask for gender, age, program status (e.g., first year), previous semesters tutoring or teaching writing, previous teaching experience, pedagogy courses taken, and whether the participant has taken this survey before.
11. Please list three things, overall, you are most confident about now regarding teaching writing. Next to each item, please also type a number from 1–5 to indicate the level of your confidence: 1 = “a little confident” and 5 = “extremely confident.” Your answer might look like this: “leading class discussions, 3.”
12. Please list three things, overall, you are most concerned or anxious about now regarding teaching writing. Next to each item, please also type a number from 1–5 to indicate the level of your concern: 1 = “very mild concern” and 5 = “extremely concerned.” Your answer might look like this: “keeping up with grading, 3.”
13. Consider the process of designing a syllabus: please list 1–2 things about creating a composition syllabus you are most confident about, and include a number (1–5) to indicate the level of your confidence (1 = low, 5 = high). Your answer might look like this: “Choosing a textbook, 3.”
14. Still on the same topic: please list 1–2 things about creating a composition syllabus you are most concerned or anxious about, and include a number (1–5) to indicate the level of your concern (1 = low, 5 = high).
15. Now consider the task of meeting with students in a classroom: please list 1–2 things about classroom teaching about which you are most confident, and include a number (1–5) to indicate the level of your confidence. Your answer might look like this: “Designing group activities, 3.”
16. Still on the topic of classroom teaching: please list 1–2 things about classroom teaching that you are most concerned or anxious about, and include a number (1–5) to indicate the level of your concern.
17. And finally consider the process of assigning and grading student essays: please list 1–2 things about assigning and/or grading student work that you are most confident about, and include a number (1–5) to indicate the level of your confidence. Your answer might look like this: “Writing an assignment prompt, 3.”
18. On that topic of assigning and grading student writing: Please list 1–2 things about assigning and grading about which you are most concerned, and include a number (1–5) to indicate the level of your concern.
19. Please rate the following to indicate whether/how well they have helped *build your confidence* as a composition teacher. Use a 1–5 scale, where 1 indicates “didn’t help much at all” and 5 indicates “helped quite a lot.” Use “0” for anything you haven’t encountered yet.
Experience as a writer

- Experience as a tutor
- Experience as a teacher
- Observing other teachers and/or being mentored by other teachers
- Role plays, WC presentations, guest- or practice-teaching
- English ### practical/syllabus assignments
- English ### writing/workshop assignments
- Reading professional articles
- Reflective writing/thinking about teaching
- Discussions/exchanges with other peer teachers
- Orientation or professional development workshops
- Other

20. Please rate the following to indicate whether/how well they have helped *build your skills* as a writing teacher. Use a 1–5 scale, where 1–2 indicate “didn’t help much at all” and 5–6 indicate “helped quite a lot.” Use “0” for anything you haven’t encountered yet.

- Experience as a writer
- Experience as a tutor
- Experience as a teacher
- Observing other teachers/being mentored
- Role plays, WC presentations, guest- or practice-teaching
- English ### practical/syllabus assignments
- English ### writing/workshop assignments
- Reading professional articles
- Reflective writing/thinking about teaching
- Discussions/exchanges with other peer teachers
- Orientation or professional development workshops
- Other

21. When you *face a challenge or a problem* as a tutor/teacher, how well do the following help you address that problem? Use a 1–5 scale, where 1 indicates “doesn’t help much at all” and 5 indicates “helps quite a lot.” Use “0” for anything you haven’t encountered or tried yet.

- Drawing on my experience as a writer
- Drawing on my previous experience as a tutor
- Drawing on my previous experience as a teacher
- Observing other teachers (or consulting their course materials)
- Consulting a mentor or adviser
- Remembering strategies from English ### assignments
- Reading and/or remembering previously-read professional articles
- Writing/thinking reflectively about teaching
- Discussing the issue with other peer teachers
- Drawing on orientation or professional development workshops
- Other

22. What would most help you now to address or alleviate your strongest concerns about teaching composition?

APPENDIX B: SHORT-ANSWER QUESTION CODING CATEGORIES

Questions 11 and 12 (overall teaching): Assignment design, classroom preparation/management, class discussion, student engagement, written feedback, grading, roles and relationships, syllabus/semester class design, teaching thinking/content, time management/organization, miscellaneous.

Questions 13 and 14 (syllabus design): Assignment design, focus/arc of course, syllabus tone/design, choosing readings/textbook, organization/pacing/workload, classroom policies, miscellaneous.

Questions 15 and 16 (classroom teaching): In-class assignments/activities, class discussion, student engagement, group work, lecturing, instructor-student relationships, resistant students, managing time/transitions, miscellaneous.

Questions 17 and 18 (assigning and grading essays): Writing a prompt, clarity of expectations, giving feedback, grading/evaluation, grading fairly/objectively, grading time management, creating supporting assignments/instruction, miscellaneous.

APPENDIX C: INTERVIEW QUESTIONS

Questions in *italics* provide possible follow-up options if needed.

Questions 1–6 ask about program status, gender, previous teaching and tutoring experience, and pedagogy courses taken.

1. Please tell me, what are some of your main steps or thought-processes as you prepare a writing-class syllabus? (*Are there any other issues or goals you consider?*)
2. Now can you tell me, what are some of your main steps or thought-processes as you prepare to teach/tutor a class meeting (or tutoring session)? (*Are there any other issues or goals you consider?*)
3. Please tell me a little about a tricky, difficult, or surprising situation you encountered recently related to teaching writing, either in class [while tutoring] or regarding a writing student [client]. (*What was difficult or surprising about it?*)
4. How did you respond? (*How are you planning to respond?*)
5. Why did [will] you respond that way?
6. What do you see as 3–4 key principles for your teaching [tutoring] of writing? (*In other words, what do you think is important for you to do as a writing teacher [tutor]? What do you try always to do or not do?*)
7. Could you say where those principles come from, or are related to? (*Were they from something you read or learned, something you heard of or saw someone doing, some experience you had?*)

8. What 1–2 questions or issues remain most uncertain and/or challenging for you about teaching [tutoring] writing?
9. How do you cope with that uncertainty right now?
10. Do any (more) of your principles help you cope? *[Interviewer may remind interviewee of answers to Question 6.]*
11. Are there any other ways that the principles you mentioned earlier, or other principles, come into play as you plan classes or solve problems?
12. On a scale of 1–5—with 1 being “not much at all” and 5 being “quite a lot”—how often do you find yourself thinking of your teaching-principles when you are involved in the following activities:
 - planning your syllabus *(even for those who are currently only tutoring)*
 - planning your class day or tutoring session
 - teaching/tutoring your session
 - responding to student writing
 - problem-solving as a teacher/tutor
19. Do you have other comments about or reflections on your recent teaching or teacher-preparation that you'd like to add to this interview?

APPENDIX D: DATA TABLES FOR SITES AND STAGES COMPARISONS

Note: While we accumulated 88 survey responses and 41 interview responses across three years, we frequently have fewer individual participants for each question: some participants did not answer the full survey; in the self-identified answers, participants were instructed to provide up to three answers to questions for which we coded up to eleven distinct categories; and some interview participants did not respond to a question. Some participants took the survey as many as three times, while others took the survey only once. Some participants who took the survey also completed the interview, once or more than once, in the same year and/or in another year; some completed one but not the other. Response rates therefore vary.

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Table 7. T-Test Survey Comparison, Analysis of Site Differences, Significant Results

Question and response category	GMU Mean, Range, SD (N = 47)	BSU Mean, Range, SD (N = 41)	<i>t</i> , <i>p</i>
19. Please rate the following to indicate whether/how well they have helped <i>build your confidence</i> as a composition teacher.			
Discussions/exchanges with other peer teachers	4.00 (3, 5) .77 (n = 42)	4.48 (3, 5) .71 (n = 33)	$t(73) = -2.81$ $p < .01$
20. Please rate the following to indicate whether/how well they have helped <i>build your skills</i> as a writing teacher.			
Discussions/exchanges with other peer teachers	3.19 (1, 5) 1.07 (n = 42)	4.21 (1, 5) .78 (n = 33)	$t(73) = -.462$ $p < .01$
21. When you <i>face a challenge or a problem</i> as a tutor/teacher, how well do the following help you address that problem?			
Writing/thinking reflectively about teaching	2.27 (1, 5) 1.03 (n = 41)	3.39 (1, 5) 1.30 (n = 33)	$t(72) = -4.17$ $p < .01$

Table 8. Chi-Square Survey Comparison, Analysis of Site Differences, Significant Results

Question and coded response-category	BSU/GMU (df = 1) N = 88
11. Please list three things, overall, you are most confident about now regarding teaching writing	
Assignment design	n = 12 $\chi^2 = 6.15^*$
Classroom preparation/management	n = 31 $\chi^2 = 6.39^*$
Written feedback/conferencing	n = 31 $\chi^2 = 7.49^{**}$
13. Please list 1–2 things about creating a composition syllabus you are most confident about	
Choosing readings/textbook	n = 18 $\chi^2 = 4.47^*$
14. Please list 1–2 things about creating a composition syllabus you are most concerned or anxious about.	
Organization/course pacing	n = 23 $\chi^2 = 4.84^*$
15. Please list 1–2 things about classroom teaching about which you are most confident.	
Lecturing	n = 6 $\chi^2 = 6.37^*$
16. Please list 1–2 things about classroom teaching that you are most concerned or anxious about.	
Student engagement	n = 9 $\chi^2 = 6.01^*$

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

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Table 9. T-Test Survey Comparison, Analysis of Stage Differences, Significant Results

Question and response category	Experienced TAs Mean, Range, SD (N = 47)	First-year TAs Mean, Range, SD (N = 41)	<i>t, p</i>
20. Please rate the following to indicate whether/how well they have helped <i>build your skills</i> as a writing teacher.			
Experience as a teacher	4.71 (1, 5) .64 (n = 31)	4.29 (1, 5) .97 (n = 34)	$t(63) = 2.02$ $p < .05$
English ### practical/ syllabus assignments	2.72 (1, 5) 1.10 (n = 25)	3.57 (1, 5) 1.22 (n = 14)	$t(37) = -2.23$ $p < .05$
21. When you <i>face a challenge or a problem</i> as a tutor/teacher, how well do the following help you address that problem?			
Remembering strategies from English ### assignments	2.59 (1, 5) 1.10 (n = 32)	3.11 (1, 5) .92 (n = 38)	$t(61) = -2.08$ $p < .05$
Reading and/or remembering previously-read professional articles	2.33 (1, 5) 1.08 (n = 33)	2.90 (1, 5) 1.02 (n = 39)	$t(70) = -2.28$ $p < .05$
Writing/thinking reflectively about teaching	2.33 (1, 5) 1.19 (n = 33)	3.10 (1, 5) 1.26 (n = 40)	$t(71) = -2.66$ $p < .05$

Table 10. Chi-Square Survey Comparison, Analysis of Stage Differences, Significant Results

Question and Coded Response Category	Experienced TAs / First-year TAs (df = 1) N = 88
11. Please list three things, overall, you are most confident about now regarding teaching writing.	
Classroom preparation/management	n = 30 $\chi^2 = 6.45^*$
15. Please list 1–2 things about classroom teaching about which you are most confident.	
Leading class discussion	n = 16 $\chi^2 = 4.54^*$
17. Please list 1–2 things about assigning and/or grading student work that you are most confident about.	
Giving feedback	n = 27 $\chi^2 = 4.70^*$

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

