

CHAPTER 9.

WRITING PROGRAM ASSESSMENT, ATTITUDE, AND CONSTRUCT REPRESENTATION: A DESCRIPTIVE STUDY

Karen S. Nulton and Irvin Peckham

Research Problem: Student attitude is related to willingness to write, and this facet of the intrapersonal domain has implications for how often and how well students wrote—as well as for equity in writing assessment.

Research Questions: When entering the university, what are students' attitudes toward writing overall and school writing in particular? Can an ecological assessment model improve student attitude toward writing to make them want to write more during class and beyond?

Literature Review: We rely on literature from writing pedagogy and writing assessment as well as research regarding sociocognitive aspects of teaching and learning.

Methodology: This is a mixed-method exploration of student attitude toward writing before and during a first-year post-secondary writing sequence. We analyzed student attitude survey data using descriptive statistics and used the ATLAS.ti coding tool to determine details associated with attitude on students' free-response answers to survey questions regarding writing.

Conclusions: Students enter into the first-year writing program with poor attitudes toward school writing and mixed attitudes toward writing in general. Implementing a sociocognitive assessment of attitude toward writing had a strong impact on improving students' attitude toward school writing.

Qualifications: Our focus on attitude as an assessable program component isolates an intrapersonal domain from interpersonal and cog-

nitive domains, which are closely linked though not studied here.

Directions for Further Study: We propose continuing research about how improving student attitude toward school writing corresponds to writing performance (quantity, time-on-task, attitude). To learn more about group and individual difference, we also propose disaggregating data by race, ethnicity, gender, and social class.

We frame our assessment within the ecology of writing (Cooper, 1986), more lately described as the “turn” toward ecomposition (Dobrin, 2011). The ecological model tracks back to Walter Clyde Allee’s (1949) protocol in the early twentieth century for investigating organisms. He argued for naturalized research, by which he meant that to truly understand a life form, you observe it within its habitat—what Egon G. Guba and Yvonna S. Lincoln (1985) term naturalized inquiry. (To study a starfish, you observe it within its environment; when you extract the starfish out to analyze it, you are no longer studying a starfish. You are studying the denaturalized starfish, which is a different life form (or death form) from the starfish in its environment.) By linking observation to an embedded biosocial context, naturalized inquiry also highlights the richly textured emotional, social, neurological, and cognitive potentials for assessment. Sociocognitive research, which includes interpersonal, intrapersonal, cognitive, and neurological aspects (White, Elliot, & Peckham, 2015), is a logical outgrowth of an ecological paradigm that explores how likely people are to act in particular ways in particular situations (Mislevy, 2016). Mislevy argues that adding sociocognitive elements to assessments can help provide “limitations on the interpretations and uses of assessment results” that have narrow construct representation (2016, p. 265). Sociocognitive assessments move beyond measuring a proficiency artifact (e.g., an exam, national and state-based standardized assessments, a graded essay) to include the social, emotional, cultural, and neurological resources that surround and define the creation of the artifact; in so doing, these assessments can mitigate construct bias that reflects environmental variance. As we demonstrate, we believe an ecological assessment model that includes sociocognitive aspects is an important vehicle for the pursuit of social justice through robust construct representation (Elliot, 2016).

In the following sections, we begin by situating our assessment within sociocognitive studies on the importance of interpersonal and intrapersonal aspects of student learning and their connection to social justice. We describe the context of our research and how we moved our portfolio pedagogy toward a more ecological model by shifting our assessment from artifact to attitude (White et al., 2015). We then move to a description of our assessment project including

the sequence and purposes of our surveys. In the subsequent results section, we begin with our baseline analysis of students' attitudes toward writing on entering Drexel University, the site of our case study. We follow our baseline analysis with data charting the results of our instruction and collaborative investigation of productive pedagogies with students and teachers, presenting the results of subsequent surveys with representative student responses over the course of two and a half years. In presenting these findings, we demonstrate that by prioritizing the quality of our students' experiences in our writing classroom, we can have a significant effect on their attitudes toward writing. We conclude by arguing for the value of an ecological model of research, assessment, and pedagogy based on non-judgmental responses to student writing in which students are invited to learn in an environment of mutual respect (Molloy, Chapter 2, this collection). We believe in, and our research confirms, the value of this kind of project—that is, if one truly believes in fairness (Elliot, 2016; Rawls, 1971)—in assigning equal value to the language of students and mitigating assessment variances associated with race, ethnicity, gender, and social class.

CONTEXT: THE NEED FOR A NEW ASSESSMENT PARADIGM

Drexel University is a large (25,595 total students; 16,464 undergraduates) private, urban, doctoral granting institution known for its cooperative education program. The school is an expensive university with a student population primarily interested in STEM-oriented professions. Drexel students are racially diverse, with 53% white students, 18% international students, 16% Asian students, 6% African American students, 6% Hispanic students. The average high school GPA of incoming students is 3.56. Students overwhelmingly come from higher income parents—the average tuition and board cost being \$34,000.

The school operates on a quarter system and has a three-quarter required writing sequence (English 101, 102, and 103). All students are required to take English 101 and English 102; students with an AP score of 4 or 5 are exempt from English 103. Prior to our shift to prioritizing attitudes toward writing, the first-year writing program relied on the Phase 2 portfolio model (White, 2005) to assess student achievement at the course-level at the end of each quarter and at the program level at the end of the final quarter.

The Phase 2 portfolio approach, scored holistically by faculty trained on a six-point scale, revealed no differences by gender or race when we compared international students with domestic students but significantly lower scores when we compared students who came from countries where English was not the medium of school instruction. The results changed our program ecology: the significantly lower scores of students who came from countries where English was not the me-

dium of school instruction inadvertently supported the complaints of faculty who viewed international students as burdens rather than assets to first-year writing classes. In response to faculty concerns, we created a pre-ENGL 101 course for those students who failed to meet minimum academic proficiency in our portfolio assessment. While our assessment allowed us to uncover and address a perceived need, we worried that our solution was based on the deficit-model of language that pervaded conversations about students' language skills and had unintended negative consequences (Papay & Williams, 2010). Even while we valued the portfolio process and appreciated that portfolio methods attempted to situate writing within a larger ecology, we saw that our assessment was clearly discriminating in troubling ways, unintentionally enacting the "linguistic imperialism" that Mathew Gomes discusses (Chapter 6, this collection).

Our assessment also failed to account for the importance of interpersonal and intrapersonal domains to writing and its assessment. For us, this lack pointed to a potential fairness issue. The 2014 Standards for Educational and Psychological Testing urge assessors who find subgroup performance differences to look for possible sources of construct-irrelevant bias; we believed that ignoring the intrapersonal domain in our assessment was one such bias. This fairness concern, ironically, pointed to an untapped pedagogical tool: a 2012 Academies of Sciences report on learning listed inter- and intrapersonal skills as two of the top three domains correlated to deep learning, suggesting that paying attention to these domains in our assessment could benefit students (Pelligrino & Hilton, 2012). We recognized a gap between our pedagogy, which encouraged facilitated group projects and ongoing reflective analysis (intrapersonal and interpersonal domains) and our assessment strategy, which focused exclusively on the cognitive domain. Fortunately, Peckham had previously worked with White and Elliot to incorporate intrapersonal and interpersonal domains into writing assessment, arguing that both instructors and employers assess writing tasks based on cognitive, personal and interpersonal domains (White et al., 2015). We realized that our current portfolio assessment was incomplete and—more importantly—not fully supportive of our learning goals or all of our students.

Our work was part of an emergent paradigm shift seeking to remediate issues of assessment equity associated with narrow construct representations (Elliot, 2016). Recognizing the importance of sociocognitive habits to writing success, the jointly published NCTE/CWPA/NWP's *Framework for Success in Postsecondary Writing* (2011) describes eight intrapersonal factors (curiosity, openness, engagement, creativity, persistence, responsibility, flexibility) related to successful post-secondary writing. The National Academy of Sciences' (2012) *Education for Life and Work* report refined the "Big Five" personality factors linked to success that have been replicated extensively (McCrea & Costa, 1987) by

distilling these traits into three domains of competence: interpersonal, intrapersonal, and cognitive (Pelligrino & Hilton, 2012). Jessie Barrot (2015) termed writing pedagogy focusing on these domains “sociocognitive-transformative,” arguing that writing is “an activity to express meaning and to build and realize interpersonal relations and social transactions between interlocutors” and so must be concerned with sociocognitive aspects of learning (p. 112). In 2015, White, Elliot and Peckham argued for the addition of a fourth domain for writing assessment—neurological—to account for the physical ability of the nerves to process information necessary to write, such as task attendance and vision. Situating our work within this understanding of sociocognitive domains, we questioned whether assessing students’ attitude toward writing (an aspect of the intrapersonal domain) could be an integral component of a more just and effective writing program.

In the fall of 2014, we began experimenting with an alternative model of program assessment that more accurately represented our curriculum, redesigned to include “meaningful writing experiences” and to prioritize attitude over argument (Eodice et al., 2016). In shifting our emphasis, we hoped to welcome the voices of international students, marginalized students, and mainstream domestic students, many of whom who had learned to dislike writing prior to entering Drexel. We relied on studies that linked attitude to learning and writing (Bandura, 2007, 2011; Bruning et al., 2013; Csikszentmihalyi, 2009; Dewey, 1938/1970; Driscoll & Powell, 2016; Duckworth et al., 2007; Farrington, 2012; Fink, 2013; Hindman, 2001; Inoue, 2014; Lucardie, 2014; McCarthy, Meier, & Rinderer, 1985; Micciche, 2007; Murphy & Alexander, 2000; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004; Yeager & Walton, 2011) and on correlational research that showed more broadly that interpersonal and intrapersonal skills contribute to college retention and success (Herman & Hilton, 2017). Our focus on attitude and meaning is also part of a longer trajectory, echoing the 1960s City College SEEK program detailed by Sean Molloy, (Chapter 2, this collection) that emphasized engaged writing as communication to support students who had been academically marginalized prior to college. Molloy reminds us that the SEEK program focused on attitude toward learning, claiming as an explicit goal to “develop an attitude in the student that will enable him to find pleasure in educational accomplishments” (Berger, 1966, p. 3, as cited in Molloy). Charles MacArthur, Steve Graham, and, Jill Fitzgerald’s (2016) meta-analysis of writing research from a cognitive perspective supports our focus on attitude, claiming, that “developing positive motivation toward writing is an important outcome of instruction” (p. 24). Our work, then, was both empirical and experiential: we knew the research about the importance of attitude to writing success but were not sure what it would mean to measure atti-

tude in our program. We found few earlier assessments on which to build; when Herman and Hilton (2017) queried the state of assessments on interpersonal and intrapersonal skills, the authors concluded that “the state of measurement of most of these competencies is still markedly underdeveloped,” and called for more research in these domains (p. 16). Our research is one response to this call.

We were particularly interested in learning what studying attitude would mean for the L2 students marginalized in our earlier assessment. We hoped that by asking students to write about and analyze their earlier relationships to writing we would shift negative experiences with writing from perceived failure into useful data. The consequence of our assessment, particularly important for students used to being evaluated on a deficit language model, was that we could document students’ improved attitude toward writing, knowing that this improved attitude correlated indirectly with better writing outcomes (MacArthur, Graham, & Fitzgerald, 2016). An early indicator that we were onto something came from the response of a student who matched our earlier profile of “at-risk” learners who came from countries where English was not the medium of school instruction. This student, after receiving a compliment from her professor on her writing, replied, “Thank you for complimenting me on my composition project, I never had anyone compliment me on my writing. I always thought that I was bad at writing so really, thank you for making me feel like I can write now.”

Inadvertently, in the process of creating a particular type of discourse community, we mimicked L2 motivation and discourse theory arguing that students learn best when they can imagine themselves in a successful discourse community that will occur post learning (Peng, 2015). For our students, the successful discourse community began in the midst of learning, not at its end (Walton & Cohen, 2007). The consequence of our assessment, particularly important for students used to being evaluated on a deficit language model, was that we could document the student’s improvement in attitude toward writing. We do not claim that this shift in attitude transformed all aspects of the student’s writing, but we do know that our assessment gave the student the chance to analyze and build on her past writing experiences rather than repeat them. Rebecca D. Cox’s 2009 study of community college writing aversion highlights the consequences of this action:

At times, the desire to avoid failure led students to inaction. Every assessment-related activity posed the risk of exposing to others (the professors and other students) what students already suspected: their overall unfitness for college-student status. Thus, not participating in classroom discussions, avoiding conversations with the professor—whether inside

or outside the classroom—or choosing not to attend class sessions offered fear-driven students another reprieve from exposure. The greatest risk, of course, lay in graded assessments of student performance. In the absence of evidence from assessments, students could still cling—however tenuously—to their college-student identity. (p. 66)

We wanted students to have the chance to reimagine a relationship to writing that would be useful—and even pleasurable—to them and to situate them within an assessment construct that gave credibility to their experiences and attitudes. We took seriously Kathleen Blake Yancey’s 2004 claim that “What we ask students to do is who we ask them to be” (p. 738). Students have too many years of drilling for tests not to understand that what we measure is what we value; our assessment gave both credibility and student agency to our pedagogy.

FOCUSING ON ATTITUDE IN THE DREXEL WRITING PROGRAM

As we moved to assessing students’ attitude toward writing, we revised our program overview to emphasize writing as communication (“meaningful writing” in Eodice et al.’s [2016] terminology):

In the First-Year Writing Program, we focus on two of the Drexel Student Learning Priorities: communication and self-directed learning. We encourage students to write clearly with a firm sense of their readers—the people with whom they are communicating. We believe that when writers connect with their readers about subjects of real concern to the writers, they will more readily continue to learn and practice writing on their own, an attitude we believe is fundamental to improving one’s writing. As a result, our students will use writing effectively in their personal, academic, and professional lives (Drexel First-Year Writing Program, 2014).

In meeting those goals, we encouraged teachers to use portfolios at the mid-term and at the end of the course to determine grades. We emphasized writers having something to say to interested readers about interesting subjects and the readers responding as readers, not critics. This pedagogical emphasis shifted our program ecology again, pushing against our earlier summative assessment by asking faculty to situate student experiences in a larger model of learned and perceived attitudes toward writing. As Kelly J. Sassi (Chapter 10, this collection)

details, professional development that shifts faculty perception from student writers from negative to positive, from writing to writer, can increase the social justice of local writing assessments. By shifting student writing from noun to verb—i.e., from performing to communicating—we believed our assessment model helped faculty shift to a more egalitarian mode of student interaction.

METHOD

For the purposes of program assessment, we sent voluntary Likert and free-response survey questions surveys through the university system to all students enrolled in our first-year writing courses. We assumed a regular progression through our required writing sequence (ENGL 101 Fall term, ENGL 102 Winter term, ENGL 103 Spring term). In our data collection, we included the negligible number of off-sequence students (transfer students, students taking the courses later in their academic career, and students who were not required to take all three courses). We did not begin by collecting student-specific identifiers, though after revising our IRB approval we asked for at-will identification.

We used the ATLAS.ti coding tool to analyze free-response questions. At the end of the AY 2014–2015 and 2015–2016, Peckham and Nulton independently coded inductively for each free-response question, then met and agreed on a codes and interpretations before a final standardized coding.

Table 9.1 lists the surveys administered and their related tables. The total numbers shown below refers to the number of students who completed each survey; since questions could be left blank, subsequent discussions of response rates—which refer to only one question in the larger survey—may not match the overall response rates listed below.

SURVEY RESULTS

Our quantitative and qualitative survey results indicate that students shifted from primarily negative attitudes toward school writing prior to entering Drexel to positive attitudes toward writing in our writing courses. We present the data progressively as we administered the surveys, beginning with our initial writing inventory and then discussing each survey administered over the course of the term and program. The survey numbers vary considerably: since the initial writing inventory was a course-based writing assignment, we requested that a representative sample of students share their work (voluntarily) and coded these responses; all other surveys were emailed to the entire class cohort. Survey response rates varied depending on when in the course cycle (with its commensurate workload) they were administered; the mid-term survey had the highest response rate each year.

Table 9.1. Schedule of surveys

Name of Survey	Time of Administration	Year/Number of Students	Reference Table and Description
Initial writing inventory	Day one of ENGL 101	2014–2015 n=262 2015–2016 n=177 2016–2017 not administered (administration change)	Table 9.2 Initial writing inventory in which students described their history as writers and their attitudes toward writing.
Mid-term survey	Week 5, ENGL 101	2014–2015 n=233 2015–2016 n=571 2016–2017 n=637	Tables 9.3, 9.4 Mid-term Likert and free-response questions about ENGL 101.
ENGL 101 survey	Post-ENGL 101	2014–2015 n=192 2015–2016 n=203 2016–2017 n=432	Table 9.5, 9.6 Retrospective Likert and free-response analysis of ENGL 101.
ENGL 102, 102, 103 composite survey	End of term, ENGL 103	2014–2015 n=283 2015–2016 n=289	Table 9.7 Retrospective Likert and free-response analysis of all courses.

INITIAL WRITING INVENTORY: STUDENT ATTITUDES TOWARD WRITING

The first data from the 2014–2015 survey documented student attitudes’ toward writing prior to entering Drexel. Because we were shifting the primary focus of our writing program from academic argument to our students’ attitudes toward writing and their experiences with writing in our program, we were interested in a baseline: what were their attitudes when they entered our program? We asked students the following question:

Please tell me about your history as a writer—what kind of good and bad experiences have you had (and what kind of in-between experiences). Reflect on outside influences that shaped your experiences—what may have influenced how much you enjoyed or didn’t enjoy the writing experience.

Student free-responses were lengthy, invested, and informative. We realized as we began to code students’ responses that we needed to account for a major distinction in attitude toward writing: 1) “writing overall,” which was an overall determination of attitude toward all writing (what we originally planned to

measure), and 2) “school writing,” or writing that was created in and for classes. Our coding for positive and negative was based on an impression whether the student’s overall attitude toward writing (overall or school) was positive or negative; in cases where positive and negative comments were equal, we coded the response as mixed. In a few instances when we could not determine if the writer was positive or negative (and there were not clearly mixed comments) we coded the responses as neutral.

Table 9.2 demonstrates how coding for attitudes toward overall writing versus attitudes toward school writing revealed quite different patterns. In AY 2014–2015 and AY 2015–2016, the surveys showed that students had more positive attitudes toward writing overall than school writing (the initial writing inventory was not administered in 2016–2017 due to a change in administration). Although we were pleased to see that more than 50% of students had positive attitudes toward writing overall in those two years at college entry, we wondered how students’ negative experiences in school writing influenced their overall attitudes toward writing.

Table 9.2. Attitudes toward writing prior to college, coded free-response, first quarter (n=439)

Writing Type/Year	Positive	Negative	Mixed	Neutral	Undetermined
Overall/2014–2015 (n=262)	52%	23%	17%	0%	8%
Overall/2015–2016 (n=177)	57%	16%	25%	0%	2%
School/2014–2015 (n=262)	20%	37%	24%	0%	19%
School/2015–2016 (n=177)	12%	31%	41%	4%	12%

Students’ responses both years showed a negative attitude toward school writing and a comparatively positive attitude toward writing in general. The following student sample shows an overall attitude toward school writing (coded as school/negative), and a positive attitude toward writing in those moments when the writer was “writing for myself” (coded as overall/mixed). This student’s dislike of school writing when creativity is limited was a common theme for our students:

Ever since I remember I have found writing to be an unpleasant experience, but I suppose this has been partially my fault. When I think of writing, thoughts of stress and sleepless nights flood my mind. Most, if not all, of the writing I have

ever done has been academic writing for school, and as it had been my tradition in high school I would leave it for the night before. Throughout middle and high school having a paper due the next day had meant staying up until 2–3 a.m. “Why do I dislike writing so much?” was a question I had not asked myself before taking this course, and I did some thinking (as much thinking as is possible in 20 minutes), and I realized it was my fault. I dug through the painful writing experiences I had before and found moments when I had enjoyed writing. What made these moments or experiences different was the fact that those times I was not writing for a teacher, but I was writing for myself. I have mostly written about books, and researched about topics in which I did not have much interest in, and I realize that that is what I do not like about writing.

MID-TERM SURVEY RESULTS

In week 5 of our 10 week fall term, we sent surveys to students asking about their attitude toward writing in English 101. The results shown in Table 9.3 represent three years of our mid-term survey collection. By week 5 (mid-term) in each of three years, the data show that students have a more positive attitude toward school writing (57%, 59%, and 61%, respectively) than when students enter the university. Attitudes toward school writing in this case were based on students’ attitudes toward English 101.

Table 9.3. Student attitudes toward English 101, percentage on Likert scale, week 5 (n=1,468)

Attitude	2014–2015 (n=262)	2015–2016 (567)	2016–2017 (n=639)
Very Pleased	15	17	21
Pleased	42	42	40
Neutral	31	31	26
Displeased	9	7	9
Very Displeased	4	3	3

We also asked the follow-up question in week 5: “Can you tell us briefly why you’re pleased or displeased so far?” For each response, we coded once as overall positive, negative or neutral and also coded according to how many characteristics the student mentioned—e.g., one student may have mentioned three positive features such as lack of stress, professor, and topic choice. Codes for the most frequent responses (using 2016–2017 as an example) are in provided in Table 9.4.

Table 9.4. Students’ top three reasons for attitudes toward English 101, coded free-response, week 5 (n=498)

Positive Characteristics Percent		Negative Characteristics Percent	
Overall positive	61	Overall negative	21
good topics/topic choice	28	writing tasks too constrained	7
good professor relationship	13	poor professor relationship	7
reflective, personal topics	6	no discipline-specific writing	5

Student responses show that positive attitudes toward school writing were heavily linked to their having a choice of topics, a positive relationship with the instructor, and a personal investment in the writing. Negative attitudes were associated with writing tasks in which the student had little control or with classes in which the student had a poor relationship with a teacher. Our results support concurrent research on writing efficacy and performance that correlates students’ emotions and positive mentor relationships with more successful writing (MacArthur et al., 2016). Additionally, we noted that students seemed more willing to reflect on specific aspects of learning when their experience was positive than when their experience was negative.

END OF TERM SURVEY RESULTS

In the ENGL 101 retrospective survey, we again asked students about their attitudes toward writing. (In 2014–2015 students gave free-responses, so we have not included those statistics in Table 9.5 below).

Table 9.5. Students’ attitude toward writing in ENGL 101; percentage on Likert Scale (n=633)

Response	2015–2016 (n=201)	2016-2017 (n=432)
Liked a lot	34	42
Liked somewhat	45	33
Neither liked nor disliked	10	11
Disliked somewhat	7	10
Disliked a lot	4	4

Again, these two years of data show positive movement from the initial 12–20% positive school writing experience (see Table 9.2) to 75–79% positive experiences with school writing as they reflected on those experiences in the second quarter of their first year of college.

In 2016–2017, we added a question on the survey about whether students' attitude toward writing had changed as a consequence of their experiences in ENGL 101. The results are shown in Table 9.6.

Table 9.6. Students' change in attitude; percentage on Likert Scale (n=429)

Response	Percent
My attitude toward writing improved in ENGL 101	52%
My attitude toward writing stayed the same in ENGL 101	44%
My attitude toward writing got worse in ENGL 101	4%

Our follow-up question shows students' shifts in attitude as a consequence of their English 101 classroom experiences. We believe that students who can articulate their improved relationship to writing (52% of our students in 2016–2017) are poised to use writing with more composure and effect than students who do not develop an improved relation to writing. Our next version of the survey will ask whether the unchanged attitude was originally good, bad, or neutral. We suspect, given the 75–75% of students who said that they enjoyed ENGL 101, that many of the 44% of students with unchanged views originally held neutral or positive attitudes toward writing.

OVERALL PROGRAM RESULTS

In 2014–2015 and 2015–2016 after students had completed ENGL 101, ENGL 102, and ENGL 103, we asked them to rate their attitudes toward writing in each course. The results are shown in Table 9.7.

Table 9.7. Students' attitude toward writing in ENGL 101, ENGL 102, and ENGL 103; percentage on Likert scale (n=1,135)

Course/Yr	A Lot	Some	A little	Not at all
101:2014–2015 (n=199)	27%	45%	21%	8%
101:2015–2016 (n=133)	35%	42%	14%	10%
102:2014–2015 (n=208)	34%	33%	20%	13%
102:2015–2016 (n=134)	36%	36%	16%	13%
103:2014–2015 (n=272)	35%	42%	17%	7%
103:2015–2016 (n=189)	39%	37%	13%	12%

Again, we saw clear improvement in attitude toward school writing from the 12–20% positive baseline reported in our initial inventory (see Table 9.2). For example, students in AY 2014–2015 reported over time increasingly positive ex-

periences with school writing in Drexel English courses—27% in English 101, 34% in English 102, and 35% in English 103. Besides suggesting that students found the English curriculum meaningful, we found such results suggestive that positive student attitudes toward school writing can be sustained over three separate courses taught by different faculty.

CLOSING THE LOOP

After we had coded the week 5 responses, we sent an email to students and faculty explaining what we found. Sent in 2015–2016, the opening to one note to students is shown below:

Dear First-Year Writing Students,

Thank you all for sharing your insights about how your first quarter is going in the First-Year Writing Program. Overall, 567 of you responded to our survey where we asked you how class is going through week 5 of the term. Here’s what you had to say (we coded when only 509 of you had responded, in case you’re a number junkie!):

Q4 - How much do you like the writing that you’re doing in ENGL 101 so far?

Very pleased	n=88	17%
Pleased	n=215	42%
Neutral	n=158	31%
Displeased	n=31	6%
Very displeased	n=17	3%

We also asked you why you were pleased or displeased with the course so far and we analyzed what you had to say. Here are the top responses:

Those of you who said you were pleased with class so far (about 61% of those who offered comments) said it was because

- You could choose what to write about
- You had freedom/room for creativity
- The topics you wrote about were interesting
- The writing was fair and enjoyable
- You learned about writing
- Your professor was good and made class enjoyable
- You got to engage in ungraded, informal writing

- You liked the writing that allowed you to understand and explore yourself

Those of you who said you were displeased with class so far (about 16% of those who offered comments) said it was because:

- You needed more teacher feedback
- There wasn't enough "useful" writing—writing that felt like you would use it again or could apply what you learned later
- The class was too disorganized/expectations were not clear
- There were too many assignment spaced too close together so you couldn't do your best work
- You weren't learning to write in your particular major or discipline

Approximately 30% of you were neutral in your analyses.

Sending the survey to students involved them in our programmatic assessment; when we asked them what would improve the program they told us and thanked us for making them part of the research team. As one student responded,

I personally filled out the survey because I'm all about making things the very best they can be. I never expected the results to be released to us students. Not only did you send us the results, but you went far beyond the norm and put in many hours of analyzed data based off the feedback received. Again, I was just so impressed because I've done a lot of survey's [sic] but have never really gotten the results back.

We sent similar analyses to faculty and students each quarter as a way of making the assessment part of an ongoing conversation among students, teachers, and program administrators. We hoped to encourage faculty and students to see themselves as researchers in a non-judgmental assessment cycle.

STUDENTS' REFLECTIONS ON SURVEY DATA

We turn now to qualitative analysis of how our assessment informed our pedagogy. After students completed their initial pre-Drexel writing inventories in 2014–2015 and 2015–2016, many classroom teachers used the first week of class to ask students to read and respond to each other's responses and then generalize about other students' experiences with writing. This writing task was not a part of our formal assessment project, but, with student permission, we asked teachers to send us any responses they thought would interest us. Reading students' responses

allowed faculty to contextualize writing resistance and to humanize and empathize with students in ways that, we believe, fostered the student-centered classrooms that improved students' writing experiences and attitudes.

One student, an architecture major, described what we also saw in students' initial survey responses (see Table 9.2):

After reading other people's experiences with writing, I realized that a lot of people shared similar back stories with me. People kept saying they started off liking writing, and did it as a hobby or even a habit. People kept journals and made lists and wrote stories. And then after a few years of school, there was a tendency for people to lose interest in writing. It became mundane and repetitive; something that was an assignment for a grade, not something to put a piece of yourself in to express or answer questions about yourself. . . . [A]t a certain point writing like this becomes boring, and quite frankly not useful for anyone involved.

Another student, an electrical engineering student wrote: "[T]here is a constant theme amongst all my group members and their experience with English class: It used to be fun and productive but as we focused more on analyzing literature and writing for specific purposes or objectives, things became dull, drab, and boring." That same student reflected:

As a child, I would always go to the library at least 3 times a month, though the thought of being a writer never crossed my mind. I would read a book and get a general idea of what it was about. I had lots of thoughts and ideas, but I did not know how to express them in words. My essays as a child were bad, very bad. I loathed writing, and I still do. English was the one class I dreaded. I do love reading, but I lack the in-depth skills that are required. I hate writing because I can never express myself through words.

What can we say about our profession when an unintended consequence of teaching and assessing writing is that students learn to hate writing?

It's worth noting that for someone who thinks he cannot express himself through words, this student expresses himself quite well in this excerpt. He, in fact, stirred us—negatively. His words got inside us and created a kind of pain in the head and constriction in the chest (Bazerman, 2013). We feel sad when we find students like this student who loathe writing and that such loathing is the result of teaching and assessment.

We contrast these early attitudes toward school writing with that of a student who explained how her attitude toward writing improved in ENGL 101:

Writing has always come [sic] slowly to me. But, despite that, I do enjoy writing. It is nice to respond to certain papers. I enjoy writing about opinion based prompts the most just because the words flow freely from my brain and I feel like I am translating my ideas on to the page . . .

English 101 made my writing much better, in a sense of becoming my own writer. I never sat down and hated writing a paper. The words flew on to the page and before I knew it, I was going over the maximum amount of words I could use. The course really helped me tremendously. With all the experiences I mentioned, I have become a better writer. . . . Writing should be enjoyed and I feel now I do like to write.

Finally, as one student observed on a final evaluation of the three courses sequence:

I absolutely love writing for all three of my English courses this year. I write on my own and personally love write. But I have to admit I hated writing papers for teachers in middle school and high school. Nothing we did seemed important or relevant to me . . . In English 101, 102, and 103, I wrote essays on topics I am interested in. For example, I wrote my “How to Essay” on “How to Become a Muslim.” I was frustrated after a really terrible experience where I was interrogated and put under security check because I am Muslim. This is something I care about so when I wrote the essay it meant so much to me. And, that’s just one example. Almost everything I have written this year for English made me a better writer only because I put effort in my writing which is because I was enthusiastic about the topics.

For us, this is the kind of writing that counts: the writer in touch with her words and having something important to say to readers she thinks should hear her. You can almost hear her self-location as a writer.

We received hundreds of comments like this one—as well as the inevitable comments from students telling us that their time and money were wasted in our classes. Nevertheless, as we have shown in our data, the negative comments were in the clear minority. We are not congratulating ourselves. We have paid

attention to educators like John Dewey, James Moffett, John Tagg, and Richard Fried and to writing theorists like Norbert Elliot. We want students and faculty to use writing to communicate ideas that they care about to people who want to hear them. We want to look at fish in the water.

TEACHERS' REFLECTIONS ON SURVEY DATA

Given our ecological paradigm, it should be unsurprising that our revised assessment also affected faculty. Twenty-one faculty members responded to an open-ended question about their experiences with reading the initial student narratives about their earlier experiences with writing; only two responses were mildly negative (95% positive response). Representative responses from teachers follow:

The essays gave me insight into what the students thought and felt about prior writing experiences that they had. Some of them had very similar experiences. After I responded to all of the students, I had the students read and respond as well. Many of them were very supportive of each other.

It was a great way to begin the dialogue between students and me and to begin to form our community of writers.

They were fun and interesting, especially as I asked students to think of this as a snapshot or selfie to which they could return at the end of ENGL 103. I want them to see self-discovery or metacognitive work on their own writing as a goal for the FWP.

They get to see how varied other students' backgrounds are in writing and that people respond to different kinds of writing in different ways. Some people actually LIKE research essays, while others—in spite of being majors in engineering—like creative writing.

Very interesting. Most of what I read confirmed what I suspected, but there were also surprises. The best outcome of reading this was that it showed me where they are insecure, what they struggle with so that I can try to work with that in class.

It was interesting to see the students so invested in what they wrote. Many like writing, but others revealed they were afraid.

Reading students' responses began to naturalize assessment, allowing faculty to contextualize writing resistance and to empathize with students in ways that,

we believe, fostered classrooms that improved students' writing experiences and attitudes. When we broadened our assessment construct, we changed the ecology of teaching and learning in our program by contextualizing students and their writing.

CONCLUSION

We believe that situating our writing program assessment within an ecological model moved us closer to an equitable assessment paradigm by expanding our construct representation. Instead of scoring student writing products, we created a dialogic assessment of the intrapersonal domain that encouraged students to enter into an improved relationship with writing and so to increase their chances of writing success. Our model helped administrators, teachers and students to communicate about teaching and learning in our program and informed changes to teacher training and student outcomes (which now reflect a programmatic focus on attitude). We do more in our classes than focus only on attitude, but we have made attitude, "first among equals" (Elliot, 2016, p. 679). We have focused in this article on attitudes toward writing because we believe a positive attitude is an important way into engaged learning. We have solid evidence that by the end of their three-course sequence we have encouraged students to become more engaged in their school writing, an engagement that we believe will have long-term effects.

Our research has given us data to support unsurprising claims—students like to be allowed space within which to explore themes and forms; they don't want to write by formulas about issues in which they have no interest (and neither do we).

In response to clarion calls for accountability, educators have largely taught students that assessment is done to them, not with them. Rather than ascribe to this practice, we are asking students to collaborate with us to improve our program—to gaze with us on the starfish in the water and describe and question the conditions they see. Changing a to-them into a with-them paradigm seems a logical step toward self-directed learning—one of Drexel's twelve student learning priorities—or as it is framed in many university essential learning outcomes: Life-long Learning. Our surveys are distinguished from traditional end-of-course evaluations in that students are not being asked to evaluate the course or teacher abstractly—instead, we are asking them to tell us how engaged *they* have been with writing and why—or why not. They are telling us what they need to consider and we want to know.

Our ecological assessment model focused us on the sociocognitive landscape we had previously ignored and helped to pinpoint where fairness and justice can broaden pragmatic assessments decisions. We hope that we have presented a useful model for assessing students' attitudes toward writing and using attitude data

for programmatic improvement. Research on learning has consistently shown the importance of attitude in teaching and learning. You can teach someone all the strategies of playing the violin, but if she never picks the violin up to play on her own, you have not taught her much. In our assessment, we asked why the violin (or the pen) became too heavy a burden—and what might lift that burden. In so doing, we began to uncover how attitude and writing intersect within a deeply embedded sociocognitive context at our university, moving us closer to entwining social justice imperatives with programmatic practice.

Our study comes with caveats; while we have demonstrated the importance of attitude to our program, we have not assessed correlations between attitude and performance, which, though vexed on many levels, is the coin demanded by many institutions. We have also not explored writing transfer beyond our courses: whether students' attitude survives complicated rhetorical situations constructed in other discipline-specific courses. Finally, we have not conducted a controlled experiment: while we claim that our pedagogy is what changed students' attitudes toward school writing, it is possible that simply writing in college—an environment that is essentially more self-directed than K-12 environments—accounts for some of the change in attitude. These are important caveats and we hope other researchers will begin to answer some of the questions inherent in our study.

Assessments have historically driven writing curriculums, constraining writing practice and affecting fairness. Since the conditions of teaching and learning—the sociocognitive experiences of our students—are not equal, assessments that ignore these conditions will seldom be fair. We offer a corrective assessment practice that defines student experiences and attitudes as fundamental components of learning, helping students to embrace a broader sense of writing and of self. Our assessment is a beginning, not an ending; by linking assessment with student attitude toward writing, we believe that we are changing our writing program through an expanded sense of construct representation.

REFERENCES

- Allee, W. C. (1949). *Principles of animal ecology*. Philadelphia, PA: Saunders Co.
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (2011). Social cognitive theory. In P. A. M. van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of social psychological theories* (pp. 349-373). London, England: SAGE.

- Barrot, J. (2015). A sociocognitive-transformative approach to teaching writing. *Indonesian Journal of Applied Linguistics*, 4(2), 132-122
- Bazerman, C. (2013). *A theory of literate action*. Fort Collins, CO: WAC Clearinghouse/Anderson, SC: Parlor Press.
- Behizadeh, N., & Eun Pang, M. (2016). Awaiting a new wave: The status of state writing. *Assessing Writing*, 29, 25-41.
- Cox, R. D. (2009). "It was just that I was afraid": Promoting success by addressing students' fear of failure. *Community College Review*, 37(1), 52-80.
- Csikszentmihalyi, M. (2009). *Flow: The psychology of optimal experience*. New York, NY: HarperCollins.
- Dewey, J. (1970). *Experience and education*. New York, NY: Macmillan.
- Dobrin, S. I. (2011). *Ecology, writing theory, and new media: Writing ecology*. London, England / New York, NY: Routledge. <http://dx.doi.org/10.4324/9780203134696>
- Driscoll D., & Powell R. (2016). States, traits, and dispositions: The impact of emotion on writing development and writing transfer across college courses and beyond. *Composition Forum*, 34. Retrieved from <http://compositionforum.com/issue/34/states-traits.php>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-1101.
- Elliot, N. (2005). *On a scale: A social history of writing assessment in America*. New York, NY: Peter Lang.
- Elliot, N. (2016). A theory of ethics for writing assessment. *Journal of writing assessment*, 9(1). Retrieved from <http://journalofwritingassessment.org/article.php?article=98>
- Eodice, M., Geller, A. M., & Lerner, N. (2016). *The meaningful writing project: Learning, teaching and writing in higher education*. Logan, UT: Utah State University Press.
- Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2012). *Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance*. Chicago, IL: University of Chicago, Consortium on Chicago School Research.
- Fink, L. D. (2013). *Creating significant learning experiences, revised and updated*. San Francisco, CA: Jossey-Bass.
- Fried, R. L. (2005). *The game of school: Why we all play it, how it hurts kids, and what it will take to change it*. San Francisco, CA: Jossey-Bass.
- Guba, E., & Lincoln Y. (1985) *Naturalistic inquiry*. Newbury Park, CA: SAGE.
- Herman, J., & Hilton, M. (2017) *Supporting students' college success: The role of assessment of intrapersonal and interpersonal competencies*. Washington, DC: National Academies Press. doi 10.17226/24697
- Hindman, J. E. (2001). Making writing matter: Using the "personal" to recover[y] an essential[ist] tension in academic discourse. *College English*, 64(1), 88-107.
- Inoue, A. (2014). Theorizing failure in U.S. writing assessments. *Research in the Teaching of English*, 48(3), 330-352.
- Lucardie, D. (2014). The impact of fun and enjoyment on adult's learning. *Procedia—Social and Behavioral Sciences*, 142, 439-446.

- MacArthur, C. A., Graham, S., & Fitzgerald, J. (2016). *Handbook of writing research: Second edition*. New York, NY: Guilford Press.
- McCarthy, P., Meier, S., & Rinderer, R. (1985). Self-efficacy and writing: A different view of self-evaluation. *College Composition and Communication*, 36(4), 465-471.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90.
- Micciche, L. R. (2007). *Doing emotion*. Portsmouth NH: Boynton/Cook.
- Mislevy, R. J. (2016). How developments in psychology and technology challenge validity argumentation. *Journal of Educational Measurement*, 53(3), 265-292.
- Murphy, P. K., & Alexander, P. A. (2000). A motivated exploration of motivation terminology. *Contemporary Educational Psychology*, 25(1), 3-53. <http://dx.doi.org/10.1006/ceps.1999.1019>
- Papay, J., Murnane, R., & Willett, J. (2010). The consequences of high school exit examinations for low-performing urban students: Evidence from Massachusetts. *Educational Evaluation and Policy Analysis*, 32, 5-23. <http://dx.doi.org/10.3102/0162373709352530>
- Pellegrino, J., & Hilton, M. (2012). *Education for life and work: developing transferable knowledge and skills in the 21st century*. Washington, DC: National Academies Press. doi <https://doi.org/10.17226/13398>
- Rawls, J. (1971). *A theory of justice*. Cambridge, UK: Harvard University Press.
- Peng, J. (2015). L2 motivational self system, attitudes, and affect as predictors of L2 WTC: An imagined community perspective. *The Asia– Pacific Education Researcher*, 24(2), 433-443. <http://dx.doi.org/10.1007/s40299-014-0195-0>
- Tagg, J. (2003). *The learning paradigm college*. Bolton, MA: Anker.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: The synergistic role of intrinsic goals and autonomy-support. *Journal of Personality and Social Psychology*, 87, 246-260. <http://dx.doi.org/10.1037/0022-3514.87.2.246>
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92, 82-96. <http://dx.doi.org/10.1037/0022-3514.92.1.82>
- White, E. (2005). The scoring of writing portfolios: Phase 2. *College Composition and Communication*, 56(4), 581-600.
- White, E., Elliot, N., & Peckham, I. (2015). *Very like a whale: The assessment of writing programs*. Logan, UT: Utah State University Press.
- Yancey, K. (2004). Postmodernism, palimpsest, and portfolios: Theoretical issues in the representation of student work. *College Composition and Communication*, 55(4), 738-761. <http://dx.doi.org/10.2307/4140669>
- Yeager, D. S., & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic *Review of Educational Research*, 81(2), 267-301. doi10.3102/0034654311405999