

Analysis of UC Berkeley Faculty's Willingness to Teach Writing within Disciplines

Abstract

While most universities require their undergraduate students to enroll in certain writing classes, many institutions structure these courses in a way whereby writing is treated as a universal skill taught outside disciplines. However, in order to address the apparent deficiency in undergraduate students' ability to communicate effectively within their disciplines, several universities have created Writing Across the Curriculum (WAC) programs which support faculty in their mission to integrate writing instruction into discipline-specific courses. Since the University of California, Berkeley implements a model contradictory to WAC – where undergraduate exposure to discipline-specific discourse conventions is limited to generic classes taught by writing professionals – this article investigates whether a change in the curriculum would be feasible, based on the perspectives of faculty at the university. The article discusses a study examining the extent to which field practitioners at UC Berkeley would be willing, or even able, to teach students how to write within their disciplines. A survey was sent to forty faculty associated with the Integrative Biology and Molecular and Cell Biology departments – and engaged in student writing on campus – through which the study analyzed the relationship between the way that field practitioners were taught to write and their willingness to teach writing within their disciplines. The results showed that 100% of faculty that had received field-specific writing training do try to incorporate it into their instruction, yet most do so in the form of laboratory reports and research reports, a choice which reflects the types of writing they believe to be important in the field of biology. Additionally, the survey revealed faculty's unfamiliarity with the WAC movement, demonstrating a need for awareness about programs which address the issue of writing being taught as a generic skill. This article discusses the possibility for UC Berkeley to improve the communication abilities of undergraduates within their fields, by offering faculty workshops in WAC, increasing student exposure to discipline-specific discourse conventions and ultimately, promoting it on the larger campus.

Keywords: Writing Across the Curriculum, conventions, undergraduate writing, faculty training

Introduction

Whether it is the result of historical perceptions of writing or a product of current opinions regarding the required skills to practice a discipline successfully, teaching writing outside disciplines is a commonly held practice in many universities. Due to this model, students are expected to possess certain writing abilities upon entering their fields, despite never having been taught how to develop such skills by field practitioners. Unfortunately – and, perhaps, even ironically – the opinion of the faculty within a discipline has become a measure of a student's writing ability, as Michael Carter (2007) explains in his article "Ways of Knowing, Doing, and Writing in the Disciplines": "what counts as good writing is writing that meets the expectations of faculty in their disciplines" (p. 408).

Regardless of the unrealistic expectations of faculty within fields, educational institutions continue to isolate writing, treating it as a generic skill that can be taught outside disciplines perhaps, in part, because "professors typically learn to write in their disciplines not by any direct instruction but by a process of slow acculturation through various apprenticeship discourses" (Russell, 1990, p. 55-56). Unfortunately, if students are not taught how to write within their disciplines by field practitioners, they are unable to utilize the discourse conventions specific to

their field, hindering their ability to effectively communicate through their writing. This is particularly evident in science disciplines, which “are often regarded as difficult and inaccessible,” possibly as a result of “the deficient ability among many researchers in the natural science fields to communicate science to a wider audience” (Pelger & Nillson, 2015, p. 439-440).

To address the issues accompanying writing outside disciplines, several universities have created Writing Across the Curriculum (WAC) programs to improve student writing. These programs are based on the premise that “students learn critical thinking best when they actively engage in the subject matter of a course through writing,” yet acknowledge that “there is no single or universal formula for satisfying [a Writing Intensive Course] requirement as courses naturally differ according to their level, form, and function” (Northern Illinois University, 2017; University of New Hampshire, 2017).

WAC programs offer seminars, workshops, and private consultations for faculty who wish to learn how to incorporate writing in their courses, discussing ways in which they can “approach teaching writing in a society characterized by increasingly specialized discourse” (Northern Illinois University, 2017). For example, Brown University’s Sheridan Center Writing Across the Curriculum Faculty Seminar “provides support for faculty to (re)design, develop, and teach a course that supports writing in their discipline” (Brown University, 2017). Similarly, the WAC Program at the University of California, Davis “helps faculty and teaching assistants (TAs) in all disciplines integrate writing assignments and writing instruction into their undergraduate courses” (University of California, Davis, 2017). By offering such resources to faculty, these programs support student writers in their objective of learning how to effectively utilize the discourse conventions associated with their disciplines.

Although faculty at many universities have come to appreciate the importance of WAC programs, the reality in most educational institutions is that “faculty in the disciplines complain about being asked to become ‘writing teachers,’ arguing that incorporating writing into their classrooms will result in an unacceptable sacrifice of course content” (Carter, 2007, p. 386). This results in “a model of education understood as the delivery of specialized disciplinary knowledge,” in which writing is considered “the province of English teachers” (Carter, 2007, p. 386). Such a model is implemented at the University of California, Berkeley, where the College Writing Programs consist of “university lecturers with advanced professional training in teaching writing,” whose role is to help students “express rich ideas thoughtfully” (University of California, Berkeley, 2017). As this system teaches writing outside the disciplines, students are not taught their discipline’s discourse conventions from field practitioners, reducing their ability to employ these techniques in their writing. But, even if universities were to modify their curriculum to incorporate writing within each discipline, would these field practitioners be willing, or even able, to teach students how to write within their disciplines?

Rationale

This inquiry is important to those who teach writing outside disciplines, as well as professors who have certain expectations for student writers in their fields. A deeper understanding of this question will aid “writing teachers” as they will discover what skills and knowledge faculty within disciplines are willing to develop in their courses, as well as the ability and experience that these faculty members possess to do so. Further, a cohesive analysis focused on faculty’s willingness to teach student writers within their discipline will provide field practitioners with a point of reference that will facilitate the development of a consensus on the

types of models they are willing to implement. Finally, those promoting a change in UC Berkeley's current curriculum – in which writing is taught as a universal, general skill by teachers outside disciplines – will have a greater awareness of how achievable their endeavor may be, based on the opinions currently held by field practitioners at the university.

Methodology

To answer this question examining the extent to which field practitioners are willing, or even able, to teach students how to write within their disciplines, a survey created by a student researcher was distributed to faculty members within the disciplines of Integrative Biology and Molecular and Cell Biology at the University of California, Berkeley. These faculty members were selected due to their engagement in student writing on campus – specifically within undergraduate courses or research projects – and were identified by analyzing course catalogues and laboratory research project descriptions. A large number of the selected faculty was chosen due to their involvement in UC Berkeley's Undergraduate Research Apprenticeship Program, which allows undergraduate students to conduct "individual research on topics connected to faculty scholarship" (Regents of the University of California, 2016). The faculty members contacted for this study were those supervising research in the Biological Sciences, as indicated in the course catalog description found on UC Berkeley's Class Schedule.

By including faculty who teach writing in research environments, rather than simply in the classroom, diverse teaching methods and varied reactions of professors could be explored. This added a layer of analysis to the research, as the priorities and willingness of faculty within different forums could be considered.

After identifying forty field practitioners associated with the Integrative Biology and Molecular and Cell Biology departments, each faculty member was individually emailed with a request to complete a survey investigating student writing within and outside disciplines. The same survey was sent out to all participants, in order to maintain consistency (see Appendix A).

The survey was divided into two parts, each addressing a core theme of the research: firstly, the ways that faculty teach student writing; secondly, the previous writing training these professionals have received within their disciplines. The first section – which focused on teaching students how to write within disciplines – also included questions examining the opinions held by faculty about altering the current model so that students are taught to write by field practitioners instead of external "writing teachers."

This report first evaluates the answers from each of these two sections in isolation, and then continues with an analysis of whether or not a connection between the two exists. Since faculty may have been reluctant to explicitly state the extent to which they would be willing to teach writing within their disciplines, understanding the relationship between the way that field practitioners were taught to write and their willingness to teach writing within their disciplines, will act as an alternate method to answering the initial research question.

Results

Of the forty faculty members that were contacted, seven responded to the aforementioned survey.

The first section of the survey studied the opinions that UC Berkeley faculty hold about student's writing abilities, and the methods they use to teach undergraduate student writing within disciplines. When asked whether they have witnessed a deficiency in the communicative skills of the undergraduate students they have taught in the past, majority of faculty responded

“yes” (Figure 1). Participants who answered affirmatively were then asked a follow-up question inquiring what they think the cause of this deficiency to be. All faculty members attributed student’s poor communication skills to a “lack of” previous training: “lack of proper exposure in high school”; “lack of rigorous instruction/practice, sometimes compounded by English as a second language”; “lack of writing requirements in courses, including science courses”; “lack of practice in critical discussion, (spoken and written) English as a second language.”

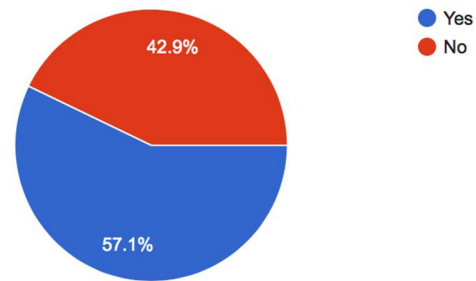


Figure 1

Since answers to the previous questions seem to indicate that students in the biological sciences at UC Berkeley are often unable to effectively communicate through discipline-specific writing, faculty have responded to this issue by trying to incorporate field-specific writing training into their courses and research. When asked whether they attempt to do so, 100% of faculty that had received field-specific writing training did try to incorporate it into their instruction; the only faculty who did not focus on writing within their specialized courses, were those who had not received any such writing training in the past (Figure 2).

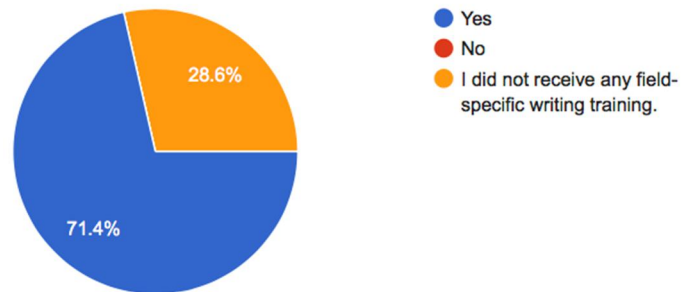


Figure 2

While field practitioners make an effort to integrate writing into their discipline-specific teaching, most faculty primarily assign laboratory reports and research reports to their students (Figure 3). When asked about the forums in which they are teaching students to write, one faculty member wrote “there is no formal writing instruction in class, but the exams have short written answers. This requires, but does not teach the skills of communication.”

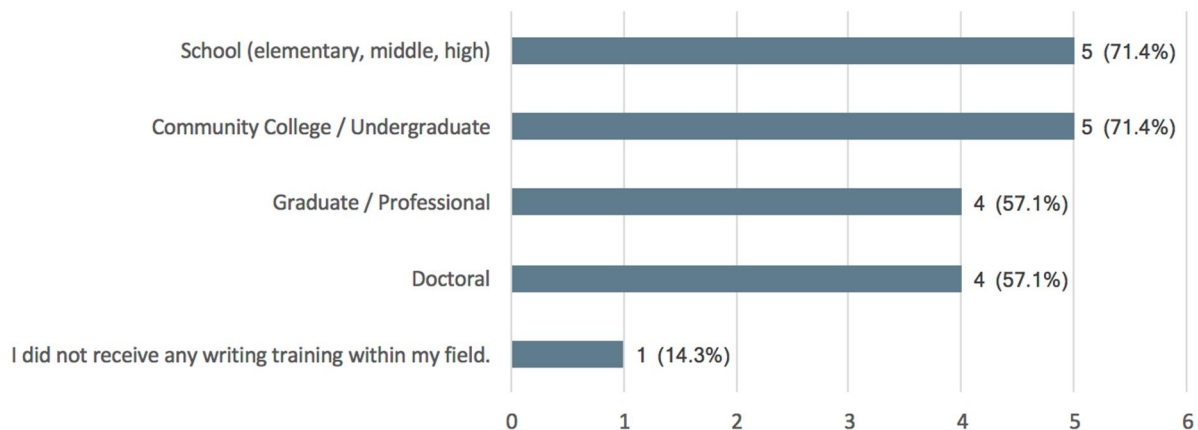


Figure 3

After reading a short description about Writing Across the Curriculum (WAC), all faculty members ranked their opinions as 2 or 3, on scales of 1 (essential) to 5 (futile), and 1 (feasible) to 5 (unattainable). Two out of seven faculty indicated that their answers were neutral because they had “not heard of WAC before” or were “not aware of the movement.” Additionally, one faculty member claimed that the importance of WAC could be accounted to the fact that “writing scientific papers is one of the main outcomes of scientific investigation.”

The second section of the survey identified the extent to which faculty’s previous training prepared them to write within their disciplines. Approximately 71% of faculty indicated that the training they received for writing within their field occurred either during their school (elementary, middle, high) years, or during their community college or undergraduate years (Figure 4). Consequently, approximately 71% of faculty expressed that, with their prior training, they did not find it challenging to apply discipline-specific writing conventions during their times as undergraduates. When asked what best prepared them for this, the responses from faculty varied, but none attributed their preparation to discipline-specific training, as evident in the following answers: “my mentors”; “courses in English composition”; “practice, practice, practice (with feedback).” On the other hand, one faculty member who expressed difficulty claimed that their greatest challenge was “writing fast enough to cover a vast amount of material in the exam,” while another responded, “no formal training; yet grades required this. I often failed.”

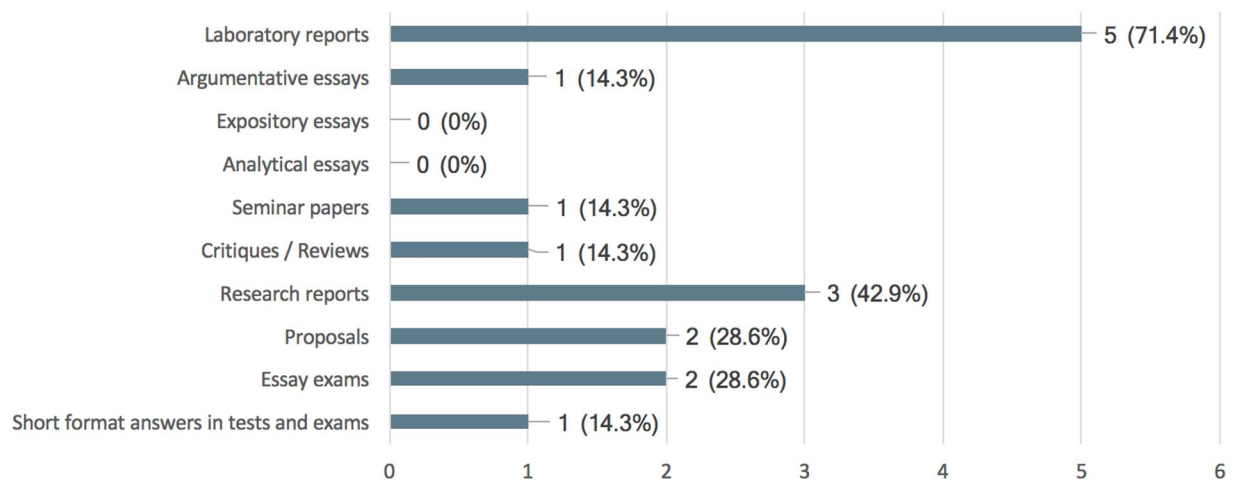


Figure 4

As discussed above, most participants indicated that they try to incorporate the field-specific writing training they have received into their teaching. When asked why they choose to do so, the responses of faculty members reflected an awareness of the need to teach writing within disciplines, as evident from some of the answers received: “this is where real learning - deep learning - with retention occurs”; “there is a tiny bit of field-specific writing in our required lab course, but very little otherwise. This is largely because undergraduate education in my field (biology) emphasizes facts over skills, something I think is unfortunate”; “scientific investigations have published papers as an important outcome.”

Discussion

Aside from the seven faculty members who responded to the survey, an additional faculty member (who did not complete the survey due to her recent retirement) responded to the initial email with the following: “Student writing skills have deteriorated significantly during my time as a professor, so I hope you can figure out why.” This response, coupled with results from the survey, indicate that faculty are aware of a deficiency in the communicative skills of undergraduate students. In addition to majority of participants claiming that they have witnessed this issue, their answers attributing this to a “lack of” previous training reveal that faculty are clearly conscious of an inadequacy in the way that writing is currently taught to undergraduates. Despite this awareness, faculty remain uninformed about movements which address the issue of writing being taught as a generic skill. This is evident in their neutral opinions about Writing Across the Curriculum, many of which were such due to faculty’s unfamiliarity with the program.

Since the results of the survey showed that 100% of faculty that had received previous writing training within their field did try to incorporate it into their teaching, and many responses reflected their recognition that writing within disciplines is important, it can be concluded that field practitioners are willing to teach writing within their disciplines. Thus, the lack of writing instruction in UC Berkeley undergraduate courses is not due to a lack of faculty willingness to teach writing within disciplines, but, perhaps, the structure of the university’s writing curriculum, in which writing is taught outside disciplines, either by graduate student instructors needing financial support in programs offering Reading and Composition courses, or by university professionals in the College Writing Programs.

Along with faculty’s willingness, an additional element that must be considered is faculty’s *ability* to teach writing within their disciplines. While most participants indicated that they did not find it challenging to apply discipline-specific writing conventions during their times as undergraduates, the ease they experienced was due to sources other than training by field practitioners (“my mentors”; “courses in English composition”; “practice, practice, practice”). As a result, it is likely that current field practitioners expect their students to learn discipline-specific writing conventions in a similar manner, seeking out this knowledge rather than being provided with it in their courses and research. However, taking into account that “competition has never been so fierce for internships,” and that the “growing population of 18- to 24-year-olds in the U.S. with more students considering college [has translated to] a surge in applicants that may increase a school’s selectivity,” it is significantly more challenging for undergraduate students in this generation to find opportunities where they may learn discipline-specific writing conventions through practical experiences (Baker, 2013; Powell, 2016). As such, universities should alter their approach to writing instruction on campus to include such training in their courses and research, in order to accommodate for the increasingly competitive environment that students face today.

Conclusion

Analyzing the results of the survey indicated that faculty at UC Berkeley are willing to teach writing within disciplines, but may lack the training and exposure to effectively incorporate such writing instruction into their courses and research. Additionally, the structure of the writing curriculum at UC Berkeley does not facilitate the teaching of writing within disciplines, only furthering students’ inability to utilize discipline-specific writing conventions. Upon identifying these issues, it is now possible to offer suggestions on how faculty at UC Berkeley might

integrate field-specific writing training into their teaching, thus enabling students to communicate effectively within their fields.

The College Writing Programs at UC Berkeley exist as a separate entity, one that markets itself as a group of writing professionals offering “a range of valuable and unique courses . . . that will suit your needs and interests and will help you effectively express your ideas and thoughtfully deploy your words” (University of California, Berkeley, 2017). As this current, stand-alone system has clearly led to a deficiency in the communicative skills of undergraduate students within specific fields, a revised model – in which faculty are taught how to incorporate writing instruction into their discipline-specific teaching – may be more appropriate for the university. Such a model would adopt a Writing Across the Curriculum (WAC) approach, in which writing professionals in the College Writing Programs could offer “a faculty-centered service focused on the most effective methods in writing instruction” (Northern Illinois University, 2017).

Since faculty are already willing to teach writing within their disciplines, workshops and training sessions would provide them with ways in which to effectively do so. By working with faculty across various disciplines, UC Berkeley’s College Writing Programs could help create field-specific models that introduce and support the teaching of writing within disciplines.

Although it would be ideal if UC Berkeley immediately implemented a WAC program, it is unrealistic to expect such a drastic change in the university’s curriculum. Thus, it may be more practical to carry out this modification of the curriculum in smaller increments. Because the results of the survey identified faculty’s unfamiliarity with WAC, the first step may simply be to provide field practitioners with a short outline of this movement and its purpose. After learning the extent to which WAC teaches writing within disciplines, faculty’s willingness to incorporate writing instruction into their teaching may change. This should be taken into account before moving on to the next step, in which professionals in the College Writing Programs would begin to work with faculty in various disciplines to support them in integrating writing assignments into their undergraduate courses. By carrying this solution out in small stages, hopefully the final objective – UC Berkeley’s College Writing Programs act as a WAC program – will be easier to achieve.

Writing professionals in UC Berkeley’s College Writing Programs can use the results of this study as evidence of the need for a structured program that draws on faculty’s willingness to teach writing within their disciplines, in order to incorporate writing instruction into field-specific courses and research. Ultimately, the utilization of these findings will help in transforming the way in which undergraduate students are taught to write within their disciplines, eventually leading to an improvement in their communication abilities.

References

- Baker, L. (2013). Internships: The competitive world of work experience. *BBC News*. Retrieved from <http://www.bbc.com/news/business-22818555>
- Brown University (2017). Writing across the curriculum faculty seminar. *Brown University*. Retrieved from <https://www.brown.edu/academics/digital-teaching-learning/explore/example/writing-across-curriculum-faculty-seminar>
- Carter, M. (2007). Ways of knowing, doing, and writing in the disciplines. *College Composition and Communication*, 58(3), 385-418.
- Northern Illinois University (2017). Writing across the curriculum homepage. *Northern Illinois University*. Retrieved from <http://www.niu.edu/wac/>
- Pelger, S., & Nilsson, P. (2015). Popular science writing to support students' learning of science and scientific literacy. *Research in Science Education*, 46, 439-456. <http://dx.doi.org/10.1007/s11165-015-9465-y>
- Powell, Farran (2016). How competitive is college admissions? *U.S. News & World Report*. Retrieved from <https://www.usnews.com/education/best-colleges/articles/2016-09-22/how-competitive-is-college-admissions>
- Regents of the University of California (2016). Class schedule. *Berkeley Academic Guide*. Retrieved from <http://classes.berkeley.edu>
- Russell, D. R. (1990). Writing across the curriculum in historical perspective: toward a social interpretation. *College English*, 52, 52-73.
- University of California, Berkeley (2017). Berkeley writing: about us. *College Writing Programs*. Retrieved from <http://writing.berkeley.edu/university-lecturers-with-advanced-professional-training-in-teaching-writing>
- University of California, Davis (2017). Writing across the curriculum (workshops and instructor training): for faculty and teaching assistants. *University Writing Program*. Retrieved from <http://writing.ucdavis.edu/programs-services/writing-across-curriculum/faculty-and-teaching-assistants>
- University of New Hampshire (2017). Writing intensive course guidelines. *University Writing Programs*. Retrieved from <https://www.unh.edu/writing/writing-intensive-course-guidelines>

Teaching Student Writing Within and Outside Disciplines

* Required

Teaching Student Writing

1. **By completing and submitting this survey, I understand that I am giving permission for my responses to be used anonymously in a student research portfolio studying the teaching of student writing within and outside disciplines. ***

Mark only one oval.

I agree for my responses to be used.

2. **Have you witnessed a deficiency in the communicative skills of the undergraduate students you have taught in the past? ***

Mark only one oval.

Yes

No

3. **If yes, what do you think this deficiency is caused by?**

4. **Currently, in what forums are you working with students to teach writing? (please select all that apply) ***

Check all that apply.

Classroom (writing assignments and writing instruction in a course)

Laboratory Research

Other Research

Club / Student Organization

Other: _____

5. **In the forum(s), what types of writing do students do? (please select all that apply) ***

Check all that apply.

- Laboratory reports
- Argumentative essays
- Expository essays
- Analytical essays
- Seminar papers
- Critiques / Reviews
- Research reports
- Proposals
- Essay exams
- Other: _____

6. **Writing Across the Curriculum (WAC) is a movement focused on incorporating writing within discipline-specific courses, rather than treating writing as a general skill taught by writing professionals. Please rank your opinions about WAC on the scale below. ***

Mark only one oval.

	1	2	3	4	5	
Essential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Futile

7. *

Mark only one oval.

	1	2	3	4	5	
Feasible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unattainable

8. **If you selected 5 for any of the options above, please explain why.**

Previous Writing Training

9. **What training have you received for writing within your field? (ex. analyzed the type of vocabulary required for a lab report style in Chemistry course; taught the mechanics of writing a journal article in Geography course) ***

10. **At which level of education did you receive the training described in question 1? (please select all that apply) ***

Check all that apply.

- School (elementary, middle, high)
- Community College / Undergraduate
- Graduate / Professional
- Doctoral
- I did not receive any writing training within my field.

11. **As an undergraduate, did you find it challenging to apply discipline-specific writing conventions with your prior training? ***

Mark only one oval.

- Yes
- No

12. **If yes, what was the greatest challenge you faced?**

13. **If no, what best prepared you for this?**

14. **Do you try to incorporate the field-specific writing training you have received into your teaching? ***

Mark only one oval.

- Yes
- No
- I did not receive any field-specific writing training.

15. **If you answered yes or no to the previous question, why do you choose to do so?**

Additional Information

16. **When did you begin teaching? (day and month do not need to be accurate) ***

Example: December 15, 2012

17. **When did you begin your career at the University of California, Berkeley? (day and month do not need to be accurate) ***

Example: December 15, 2012

18. **In addition to Biology, are there any other fields that you are currently associated with? Please list all that apply.**

19. **Additional comments: please add any other information you feel to be relevant to this survey.**

20. **Thank you for filling out this survey! If you are willing to be contacted for follow-up questions, please provide your email or phone number below.**

