

Supporting Students in the Writing Intensive Classroom: Insight on Reducing Writing Apprehension

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Abstract

Written communication skills are often among the most important applied skills sought by employers when hiring graduates of colleges of agriculture. However, recent reports cite a gap between employers' expectations and graduates' levels of preparedness in key applied skills, among them "effective written communication." One critical barrier to developing effective written communication skills is writing apprehension. This study surveyed undergraduate students ($n = 74$) in a writing intensive course to determine which course structures and writing interventions were most effective at reducing apprehension. Students reported course structures, such as the ability to revise and resubmit assignments, and written or verbal feedback from instructors as the most effective in reducing apprehension. While course structures were overall more effective than specific interventions, among interventions, modeling was most effective at reducing apprehension

Keywords: writing apprehension, modeling, peer review, writing intensive, grammar

Employers have consistently reported "effective written communication" as a skill they value among college graduates (Crawford et al. 2011, 2020a; National Association of Colleges and Employers [NACE], 2006). A 2020 report from the Association of Public Land-Grant Universities (APLU), however, identified a gap between employers'

expectations and graduates' levels of preparedness on key soft skills. Among the importance-preparedness gaps was communications, including written communication (Crawford et al., 2020b).

Historically, authors have attributed these types of gaps to waning student interest in writing, usually as a byproduct of decreased importance placed on writing in American high schools. The first such reports lamenting that "Johnny can't write" (see Shiels, 1975) were released in the 1970s (Carter & Harper, 2013; Dieterich, 1977). However, writing across the curriculum (WAC) scholars contend that notion is largely a persistent misperception (Amo, 1998). Literacy rates have actually remained rather steady in recent decades (National Assessment of Educational Progress [NAEP], 2021). Rather, the workforce continues to demand higher academic and professional literacies of new hires and students are not improving to meet that demand (Amo, 1998; Goldsmith, 2020; NAEP, 2021).

Employers hiring graduates of colleges of agriculture (COAs) have similarly lamented graduates' not meeting expectations of writing proficiency and insisted COAs make writing a higher priority (Ahrens et al., 2016; Anderson, 2014; Fischer et al., 2017a; Leef, 2013). Land-grant institutions, in particular, have an obligation to "educate rural students and provide them with not only technical skills but also basic skills, such as writing" (Leggette et al., 2011, p. 61).

As a curricular strategy, COAs frequently use writing intensive (WI) courses in an effort to build students' writing skills and writing self-efficacy. Learning to write well requires repeated practice over a long period of time (Kellogg &

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Raulerson, 2007; Leggette et al., 2011; Trojan et al., 2016), and WI courses allow students to “immerse themselves in a writing-rich environment” (Fischer et al., 2017b, p. 256). WI courses afford the opportunity for small in-class assignments and larger out-of-class assignments, as well as multiple assignments that build on each other where the focus is, at least in part, on improving students’ writing. This opportunity for practice and numerous writing assignments, when completed successfully, increases students’ self-efficacy (Legette & Homeyer, 2015). The WI course format also allows teachers to “push effective writing strategies to higher quality levels” (Fischer et al., 2017b, p. 256).

Despite COAs efforts to close the writing skills’ importance-preparedness gap, one critical barrier they face is writing apprehension and its subsequent behavior of writing avoidance, which often results in students’ writing apprehension while in WI courses or avoiding unrequired WI courses altogether (Ahrens et al., 2016; Daly & Miller, 1975; Fischer et al., 2017a; Kelly & Gayton, 2020). Daly and Miller, who coined the term “writing apprehension” in their 1975 seminal work, define it as, “a general avoidance of writing and situations perceived by the individual to potentially require some amount of writing accompanied by the potential for evaluation of that writing” (p. 37). A more contemporary definition, and one more useful to understanding this study, is Fischer and colleagues’: “the interaction between attitudes toward writing and an individual’s motivations, confidence, and skills to complete a written task” (2017b, p. 255).

Writing apprehension is an issue for several reasons. First, it elicits avoidance behaviors. Students with writing apprehension are more likely to fail to send in compositions, not attend class when writing is necessary, or be unwilling to participate in classes where substantial writing is known to be required (Daly & Miller, 1975; Davies & Birbili, 2000). Further, students are less likely to pursue jobs where significant writing is required, and, if they are put in positions that require writing, they will complain that they are dissatisfied (Daly & Miller, 1975; Faigley et al., 1981; Hammann, 2005). Second, when engaging in a writing activity, anxiety depletes the resources of a student’s working memory, creating a barrier to completing the task (Söderqvist et al., 2014). Kelly and Gayton write, “Individuals who experience writing apprehension use their working memory to manage their anxiety symptoms, depleting the resources needed to compose the message and proofread it...One of the most critical barriers to students’ ability to learn to write is their own writing apprehension” (2020, pp. 96-97). Researchers believe that extremely apprehensive writers are less likely to excel academically (Kelly & Gayton, 2020). Possible causes of anxiety are poor writing ability growth and instructors’ negative reactions to the student’s early writing attempts (Daly & Wilson, 1983).

This study uses Bandura’s (1977, 1986, 1995, 1997) self-efficacy model as its theoretical framework. Writing apprehension is directly related to self-efficacy beliefs. Daly (1978) noted that as a student’s level of self-efficacy rises, levels of writing apprehension fall. In order to decrease writing apprehension, students should be provided an opportunity to increase self-efficacy and self-belief (Kellogg

& Raulerson, 2007). Indeed, writing interventions and course design, in the context of WI courses, are largely intended to increase a student’s self-efficacy related to writing.

There are several ways to increase self-efficacy and reduce writing apprehension in the classroom. Here, we discuss two common interventions, which we used in this study. First, a widely used intervention is peer review, which is when students review each other’s writing assignments before submitting for a grade. Peer review helps students find errors in their own writing, gain trust in their writing skills, and become more likely to seek help in the future (Bayat, 2014; Cho & MacArthur, 2011; Wingate, 2010). Peer review can be also used prior to writing as a sounding board for ideas and to assist with concept formation (Aherns et al., 2016). Finally, students who see others completing a writing task will make social comparisons, which “can be powerful influences on developing self-perceptions of competence” (Pajares, 2003, p. 140).

A second, less commonly used intervention we employed is modeling. Modeling often takes the form of the instructor demonstrating in detail how he or she would complete a writing assignment, including discussing their writing process, crafting a thesis statement, or creating an annotated bibliography. Modeling could apply to learning from others, including peers, and even from shared examples of quality written assignments from past students that serve as exemplars. The latter are called mentor texts (Fletcher, 2011; Gallagher, 2011). Similar to how peer review influences a student’s self-perception of competence, modeling has been shown to affect students’ self-efficacy; modeling aids students in setting expectations for their own levels of efficacy (Bandura, 1977).

In addition to specific interventions, Legette and Homeyer (2015) recommend a litany of practices that could be integrated into a course’s structure, including the following: fostering a writing-rich environment; repetitious, project-building assignments; in-depth feedback at regular intervals; one-on-one feedback; providing good examples (though, with the caveat this could stifle creativity); focusing on quality of writing over quantity; and developing engaging assignments. Sommers (2013) also stresses the importance of designing into a course’s structure high-quality feedback, one-on-one feedback, and regular feedback.

Despite these recommendations, more research needs to be conducted on the teaching strategies and course structures that help students become more effective writers and close the importance-preparedness gap (Leggette & Homeyer, 2015). Kelly and Gayton write, “the biggest barrier to developing successful writing skills, writing apprehension, has received very little attention from scholars in the past 30 years” (2020, p. 96). Leggette et al. (2015) also recommend that instruments be developed to determine which writing tasks help students become more effective writers.

Purpose and Research Objective

This study was guided by a single research objective: To determine the degree to which key writing interventions (i.e., writing boot camp, modeling, and peer review) and course structures increase self-efficacy and reduced students’

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levels of writing apprehension. The purpose was to provide empirical evidence of the efficacy of writing interventions and course structures to help instructors prioritize strategies used to lessen writing apprehension in writing intensive courses.

Methods

In this institutional review board (IRB)-approved, quantitative, pilot survey research study, we used a researcher-created instrument to measure students' self-reported effects of various interventions and course structures on reducing their writing apprehension (Ary et al., 2013). We used a convenience sample comprised of 139 undergraduate students in the same writing intensive group leadership course across two consecutive semesters at the University of Missouri's College of Agriculture, Food & Natural Resources (COA).

The survey instrument measured students' perceptions of what elements of the course lessened their writing apprehension. This 29-item instrument featured five-point, Likert-type responses. Questions addressed three teaching interventions (two of which we have discussed prior and one we present here), which were conducted at relevant time periods during each semester. First, peer review — a specialized process where students review each other's completed assignments in turn — was presented in a one-hour lecture section where we first prepared students on the purpose and steps of a peer review and then provided time for students to review each other's completed assignments prior to submitting for a grade. Second, modeling — a strategy where the instructor demonstrates how he or she would complete an assignment in the course — was presented in a one-hour dedicated lab section where students were introduced to their major assignment. Finally, "writing boot camp" — a typical classroom lesson, held in a one-hour lab section, and conducted at the outset of each semester — reviewed basic grammar, usage, and style details students were expected to know in the course.

We created three identical scales, one for each intervention, with the prompt "...to what extent do you agree that the activity..." followed by six items per scale, including the following: (a) increased my confidence in my writing ability; (b) helped me to be better at organizing my thoughts on paper; and (c) helped me produce a high-quality written product. We also created a fourth scale with six items to determine which factors related to the course's structure helped to lessen students' writing apprehension. This scale was developed by identifying best practices in the writing apprehension literature (e.g., Legette & Homeyer, 2015), which included "written or verbal feedback from teaching assistants," "multiple opportunities to review and resubmit assignments," "number of assignments," "access to Mizzou Writing Lab writing lab."

We tested the four scales in this instrument for post-hoc reliability using Cronbach's alpha (Gliem & Gliem, 2003). All scales met Spector's (1992) criteria for a summated rating scale, and all scales were at least "acceptable," according to George and Mallery's (2003) classification of alpha scores. The writing boot camp scale consisted of six items ($\alpha =$

.871); the modeling scale consisted of six items ($\alpha = .882$); the peer review scale consisted of six items ($\alpha = .939$); and the course structure scale consisted of six items ($\alpha = .757$).

We invited all students during each of the two semesters of the course ($n = 139$) to participate and 53% ($n = 74$) of students completed the instrument. We first analyzed the two semester groupings of students using independent samples t-tests to determine if the groups were significantly different. They were not statistically significantly different. Therefore, we combined the two semesters of students for data analysis. Means and standard deviations were used to describe students' perceptions of various interventions on lessening their writing apprehension.

Results and Discussion

When comparing students' perceptions of how the three teaching interventions (i.e., writing boot camp, modeling, and peer review) impacted their levels of writing apprehension, we found overall scale means ranging from 3.57 ($SD = .906$) to 3.83 ($SD = .781$) (Table 1). Modeling was rated highest overall and highest on each individual item except for "Helped me improve grammar or punctuation," where students reported writing boot camp to be most impactful (writing boot camp is dedicated primarily to grammar and punctuation review). Modeling, in this case, included the instructor discussing and providing examples of how she would devise a writing process, craft a thesis statement, and complete an annotated bibliography. That modeling would be reported as helpful in building self-efficacy is in line with literature (Bandura, 1977).

Peer review was rated lowest by respondents overall and on each individual item. This was surprising, as peer review is one of the more common activities associated with WI courses and has substantial support in the literature (e.g., Bayat, 2014; Cho & MacArthur, 2011; Wingate, 2010). This may be due to peer review's benefits occurring only if an explicit structure is used; similarly, benefits of peer review are most pronounced when stable peer review groups work together over time, which was not the case in this study. Lastly, whether true or not, students tend to perceive having learned more from instructor-led activities (such as the writing boot camp lesson and modeling) rather than active learning events, such as peer review (Goldsmith, 2020).

Course structures refer to ongoing practices built into a WI course rather than a discrete teaching intervention. Overall, the course structure's scale's mean score (Table 2) was rated higher than any of the three teaching interventions' overall mean scores.

Among course structures, the three highest-rated factors support prior research. First, "Multiple opportunities to review and resubmit assignments" support Legette and Homeyer's (2015) qualitative study of students in WI courses, which recommended repetitious, project-building assignments (which typically have opportunity to review and resubmit). Second, "Written or verbal feedback from TA or instructor," support Sommers (2013) recommendations to provide targeted feedback and build relationships between writer and instructor through the dialogue that occurs via written feedback. According to Sommers (2013), these

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Table 1.

Comparison of writing interventions and the degree to which students' ($n = 74$) reported they reduced their level of writing apprehension

| Factor | Boot Camp | | Modeling | | Peer Review | |
|---|-----------|------|----------|------|-------------|------|
| | M | SD | M | SD | M | SD |
| Increased my confidence in my writing ability | 3.68 | .813 | 3.88 | .740 | 3.60 | .885 |
| Helped me to better organize my thoughts on paper | 3.69 | .792 | 3.80 | .780 | 3.59 | .871 |
| Helped me produce a high-quality written product | 3.74 | .723 | 3.84 | .741 | 3.64 | .816 |
| Helped me improve grammar or punctuation | 3.70 | .811 | 3.66 | .864 | 3.61 | .943 |
| Was a worthwhile use of lab time | 3.73 | .886 | 3.96 | .750 | 3.51 | .964 |
| Was better than the other activities | 3.74 | .812 | 3.83 | .811 | 3.57 | .961 |
| Overall Mean | 3.71 | .806 | 3.83 | .781 | 3.57 | .906 |

Note. 1-1.49=strongly disagree; 1.50-2.49=disagree; 2.50-3.49=neither agree nor disagree, 3.50-4.49=agree; 4.50-5=strongly agree.

Table 2.

Course structures and the degree to which students ($n = 74$) reported they reduced their level of writing apprehension

| Factor | M | SD |
|--|------|------|
| Written or verbal feedback from TA or instructor | 4.19 | .722 |
| Multiple opportunities to review and resubmit assignments | 4.24 | .792 |
| Number of writing assignments | 3.82 | .908 |
| Participation in the three teaching interventions (i.e., writing boot camp, modeling, peer review) | 3.75 | .900 |
| Access to resources offered by the [university] writing lab | 3.71 | .929 |
| Access to resources offered by instructor on Canvas | 4.15 | .757 |
| Overall Mean | 3.97 | .834 |

Note. 1-1.49=strongly disagree; 1.50-2.49=disagree; 2.50-3.49=neither agree nor disagree, 3.50-4.49=agree; 4.50-5=strongly agree.

practices serve to increase self-efficacy and make students feel a part of the academic community. Quality feedback, “promotes students’ authority and authorship by giving them feedback about their strengths and limitations” (Sommers, 2013, p. 4). Third, “Access to resources offered by the instructor on Canvas” (which, in this study, were primarily examples of high-quality assignments), provides evidence for the efficacy of mentor texts (Fletcher, 2011; Gallagher, 2011). Meanwhile, “Access to the university’s writing lab” and “The three teaching interventions” were among the lowest rated.

Summary

Writing apprehension is a barrier to developing effective writing skills (Kelly & Gayton, 2020) and writing continues to be a skill employers report as lacking in college graduates (Crawford et al, 2020b). Little scholarly attention has been devoted to determining the most effective teaching strategies

and writing assignments to increase writing self-efficacy and reduce writing apprehension among students (Kelly & Gayton, 2020). While this study of two semesters of a WI course has the dual limitations of piloting a new, researcher-created instrument and being ungeneralizable, its findings do provide useful quantitative data helpful in determining what students feel reduces their writing apprehension, as well as offering limited quantitative support for other qualitative studies’ findings (e.g., Legette & Homeyer, 2015; Sommers, 2013).

Overall, students reported ongoing course structures were more useful in reducing apprehension than any one-time intervention. Among course structures, the ability to review and resubmit assignments, coupled with written or verbal feedback from a TA, proved to be the most useful in reducing students’ apprehension. This extends Sommers’ (2013) findings from writing-specific courses by providing empirical support that these same factors may be critical in discipline-specific courses as well (in this case, a team

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leadership course). As teachers of writing intensive courses in various disciplines within COAs consider what strategies to use to reduce apprehension, these two aspects of course structure appear to be efficacious in this context.

There was also an interesting convergence surrounding modeling. Modeling was the highest rated intervention, but also, among course structures, “Access to resources offered by instructors on Canvas” (which were primarily exemplars of class assignments — “mentor texts”), was scored among the highest. Mentor texts are considered a written form of modeling, and the process by which they increase self-efficacy is similar. This finding empirically supports the limited literature on the efficacy of mentor texts (e.g., Fletcher, 2011; Gallagher, 2011). As teachers of writing intensive courses consider what strategies to use, incorporating modeling into lecture — particularly when explaining major assignments — and providing mentor texts to guide students appears to be a high-impact writing apprehension reduction strategy.

We recommend further refining the instrument used to collect these data and replicating this survey across a wider variety of WI courses. We also recommend future research be conducted using an explanatory sequential mixed methods design to provide both quantitative and qualitative descriptive ability in order to bring greater understanding to what factors increase self-efficacy and reduce writing apprehension in WI courses and beyond (Creswell & Plano Clark, 2011).

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