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Analytical Articles

Using In-Class Versus Out-of-Class Peer Workshops to Improve Presentational Speaking

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Even though conversations at communication conferences suggest that peer workshops are a commonly used pedagogical strategy in public speaking classrooms, very little research has been conducted to establish best practices for using peer workshops in public speaking classes. Broeckelman (2005) first wrote about a structured way to utilize peer workshops in public speaking classes, and detailed instructions for implementing these in other public speaking classrooms were later published (Broeckelman, Brazeal, & Titsworth, 2007). Broeckelman-Post, Titsworth, and Brazeal (2011) later found that students who used peer workshops improved the quality of their speeches significantly more over the course of an academic term than students who did not use workshops, but found that there were minimal or no differences for other variables, depending on the university. However, there is no research investigating what type or format of peer workshop is most effective for enhancing student learning and public speaking performances. The goal of this paper is to begin to fill this gap by comparing the effects of in-class and out-of-class peer workshops in the public speaking classroom.

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LITERATURE REVIEW

Peer Workshops

Peer workshops are sessions in which students work in small groups to provide feedback to one another on writing, speeches, or other class projects. In public speaking classes, peer workshops are typically conducted a class period or two before students perform their speeches for a grade, and are an opportunity for students to provide and receive constructive feedback on their speech outlines. When there is time, some instructors are able to include a second peer workshop that allows students to provide constructive feedback on practice speech performances. The first time that peer workshops are done in class, Broeckelman et al. (2007) recommend doing a brief role-playing exercise to train students to engage effectively and provide constructive feedback, followed by a class conversation about what types of feedback are and are not most helpful, before breaking students into groups of three. Once students are in groups, they are asked to identify at least three areas in which they would like feedback from their peers before giving their speech outlines and a peer workshop form with guided questions to their peers. Students then do a careful reading and provide written feedback on each other's speeches. Afterward, they have a conversation about their speech outlines and offer additional suggestions. Broeckelman-Post et al. (2011) found that using this structured format for peer workshops improved the quality of student speeches significantly more over the course of an academic term compared to students who did not have an opportunity to engage in such workshops, though there were mixed

findings for whether peer workshops had any significant impact on Public Speaking Anxiety and Connected Classroom Climate. However, on all variables, students who engaged in structured peer workshops had the same or greater benefits in the public speaking course.

To date, no research has been published on peer workshops conducted outside of class in public speaking classes, so for the purposes of this study, out-of-class workshops will be conducted using the same guided workshop form developed by Broeckelman et al. (2007), but students will take each other's outlines and workshop forms home to provide written feedback, and then give those written comments to their peers during the next class period. No class time will be used to conduct the role playing exercise or to give verbal feedback.

Though no other research has been conducted on the use of peer workshops in public speaking courses, empirical research does exist on the benefits of peer workshops and peer feedback in other classroom contexts. Sellnow and Trienen (2004) point out that peer critiques are now commonplace in public speaking classes and Reynolds (2009) indicates that these workshops stimulate the kinds of feedback that students will need to eventually give and receive in the workplace. Writing courses have used workshops for some time, and the practices and benefits of such workshops are well-documented (e.g., Atwell, 1998; DiPardo & Freedman, 1988; Spear, 1993). Other researchers have built a strong case for the benefits of cooperative and collaborative learning when it is structured well (e.g., Johnson, Johnson, & Smith, 1998; Lee & Smagorinsky, 2000), and peer workshops are a very structured type of cooperative or collaborative learning. Public speeches that

are developed through such collaborative workshops become multi-authored, but this reflects the dialogic nature of all communication (Bakhtin, 1929/2001).

Previous research suggests that there are two primary reasons that peer workshops help students improve performance. The first is that receiving feedback and justifications for that feedback from multiple peers helps students make better revisions that include more complex repairs than when they receive feedback from a single expert (i.e., an instructor), especially when justifications for the suggestions are given (Cho & MacArthur, 2010; Gielen, Peeters, Dochy, Ohghena, & Struyven, 2009). The second reason that peer workshops improve student performance is that students have the opportunity to practice providing critical feedback to others, which might be more beneficial than receiving feedback (Li, Liu, & Steckelberg, 2010). Lundstrom and Baker (2009) found that students who gave feedback to others but never received feedback made more significant gains in the quality of their writing across the semester than students who received feedback but never had the opportunity to give feedback to others.

In-class workshops provide students with an opportunity to engage in face-to-face in-class communication while giving mostly oral feedback within a constrained time frame, while out-of-class workshops provide students with an opportunity to provide primarily written feedback that is not limited by the constraints of the class period and is delivered later. Thus, there are different potential benefits and drawbacks for each format. While a great deal of research has been conducted on out-of-class communication between instructors and students (e.g., Aylor & Opplinger, 2003; Dobransky &

Frymier, 2004; Myers, Martin, & Knapp, 2005; Williams & Frymier, 2007), little research has been conducted on the effects out-of-class communication between students as it relates to specific class assignments. Furthermore, while in-class workshops offer the opportunity for face-to-face communication, they take time that could otherwise be devoted to other classroom learning activities. Thus, it is important to find out whether there is a significant difference in the relative benefits that each type of workshop offers students in communication courses in which students engage in public speaking.

Student Learning

Scholars note that it can be difficult to measuring student learning (Frymier & Houser, 1999; Richmond, Lane, & McCroskey, 2006). For this reason, student learning is typically measured by examining students' engagement behaviors, affective learning, and performance. In regard to student engagement, Frymier and Houser (1999) argued that there are numerous activities or behaviors that demonstrate student engagement with course content. These behaviors can include asking question in class, explaining ideas to other students, participating in class discussions, and integrating new course content to previously learned ideas.

Given that peer workshops, when viewed as a form of cooperative learning, offer important gains for student learning such as higher-level reasoning, increased knowledge transfer across learning contexts, and higher achievement and productivity (Johnson & Johnson, 1999), we expect that the ways in which students engage in peer workshops (i.e., in-class versus out-of-class)

will impact their engagement with learning course content. In order to examine this prediction, the following hypothesis was tested:

H₁: There is a difference in student learning over an academic term between students who participate in in-class versus out-of-class peer workshops.

In regard to affective learning, Krathwohl, Bloom, and Masia (1964) defined the affective domain of learning as those objectives that emphasize emotions or degrees of acceptance or rejection of learning material. Working cooperatively with peers helps students build and maintain relationships, improves productivity, morale, feelings of commitment, and well-being. Therefore, we expect that the ways in which students engage in peer workshops (i.e., in-class versus out-of-class) will impact their affective learning. In order to test this relationship, the following research question was asked:

RQ₁: Is there a difference in affective learning over an academic term between students who participate in in-class versus out-of-class peer workshops?

The psychomotor domain of learning is concerned with performing behavioral skills (Bloom et al., 1956). As such, being able to develop and deliver an effective presentation would be illustrative of competency in this domain in performance-based courses (McCroskey, 1982). Because in-class peer workshops have been shown to impact the quality of speech performances (Broeckelman-Post et al., 2011), and because all types of workshops provide a structure for scaffolding learning experiences (Vygotsky, 1986), we think that it is possible that the ways in which students engage in peer workshops (i.e., in-class versus out-of-class) will impact

the quality of their speeches differently over the academic term. In order to explore this relationship, we ask the following research question:

RQ₂: Is there a difference in the quality of student speeches between students who participate in in-class versus out-of-class peer workshops?

Public Speaking Anxiety

Public Speaking Anxiety (PSA) is defined as “situation-specific social anxiety that arises from the real or anticipated enactment of an oral presentation” (Bodie, 2010, p. 72) and generally fits into one of two categories: trait PSA, which is anxiety experienced across communication contexts regardless of the specific situation, and state PSA, which is anxiety experienced in a particular setting and time (Spielberger, 1966). PSA is a specific type of Communication Apprehension (CA), which is a broader construct defined as “an individual’s level of fear or anxiety associated with either real or anticipated communication with another person or persons” and includes a range of communication contexts including dyads, small groups, and meetings (McCroskey, 1970; McCroskey, 1982; McCroskey & Richmond, 2006, p. 55). Trait CA is primarily biological and influenced by genetics, so it cannot be easily overcome (McCroskey, 2009). Because State CA and State PSA are heavily influenced by Trait CA, they cannot be completely mitigated, but researchers have found ways to reduce State PSA some using methods such as habituation, cognitive modification, systematic desensitization, visualization, performance feedback, communication-orientation modi-

fiction therapy (COM therapy), skills training, and specially designed courses (Bodie, 2010; Finn, Sawyer, & Schrodtt, 2009; McCroskey, 2009). Since peer workshops give basic communication course students an opportunity to practice their speeches (habituation), receive feedback from others, and since students are given skills training throughout the class, we expect that students will reduce their PSA somewhat in both conditions, but we also think it is likely that in-class and out-of-class workshops will impact PSA differently. In order to explore this prediction, we ask the following research question:

RQ₃: Is there a difference in the change in Public Speaking Anxiety over the course of an academic term between students who participate in in-class peer workshops versus out-of-class peer workshops?

Connected Classroom Climate

Connected classroom climate is defined as “student-to-student perceptions of a supportive and cooperative communication environment in the classroom” (Dwyer et al., 2004, p. 267), and is characterized by a sense of belongingness, social support, and connection within a classroom community that allows students to feel free to express themselves. Previous research has shown that classroom climate is influenced by teacher’s use of slang (Mazer & Hunt, 2008), student motivation to communicate with their instructor (Myers & Claus, 2012), instructor verbal aggressiveness (Myers & Rocca, 2001), and affinity-seeking strategies used by instructors (My-

ers, 1995). Research has also shown that classroom climate is positively related to nonverbal immediacy and student affective learning (Johnson, 2009) as well as students' willingness to talk in class and preparedness for class (Sidelinger & Booth-Butterfield, 2010). Additionally, sense of belonging is positively associated with academic progress and student retention/ intention to persist, though these factors also appear to be influenced heavily by student motivation (Meeuwisse, Severiens, & Born, 2010; Morrow & Ackermann, 2012). Because peer workshops provide students with several opportunities to build relationships and interact with classmates and have previously been shown to influence connected classroom climate (Broeckelman-Post et al., 2011), we want to find out whether in-class and out-of-class peer workshops have the same impact on classroom climate over the course of the term. To explore this relationship, we ask the following research question:

RQ₄: Is there a difference in Connected Classroom Climate between students who participate in in-class versus out-of-class peer workshops?

Finally, because in and out-of-class workshops differ in the amount of face-to-face communication, written communication, and time restrictions, it is possible that students will perceive that one type of workshop is more useful or valuable than the other. In order explore this possibility, we ask the following research question:

RQ₅: Is there a difference in perceived workshop value between in-class and out-of-class peer workshops.

METHOD

The purpose of this study was to find out whether there is a difference in the effectiveness of in-class and out-of-class peer workshops in a public speaking class. This study used a modified switching replications repeated measures design with workshop group serving as the independent variable (between-subjects factor), and speech grade, communication apprehension, connected classroom climate, learning indicators, affective learning for the workshop, and perceived workshop value serving as the six dependent variables (within-subjects factors). Switching replications allowed us to examine the potential benefits of both kinds of workshops to all students who participated in the study and find out whether changes in the dependent variable were due to manipulation of the independent variable (Wrench et al., 2008). Furthermore, the repeated measures design reduces the number of subjects needed by removing variability due to individual differences from the error term, which is statistically “much more powerful than completely randomized designs” (Stevens, 2002, p. 492).

Participants

A total of 96 students enrolled in four sections of public speaking at a public western university were selected to participate in this study. Students did not know about the study prior to enrolling in these sections of the course, so the sections should have been equivalent groups that would have been similar to the groups that would have resulted from random assignment. These sections were taught by two instructors, and each instructor was asked to teach one section using each of

our two treatment conditions to equalize any instructor effects between the two conditions. This assumption of equivalent groups is further confirmed in the results, which show that there were no statistically significant differences between groups on any of the dependent variables at the first measurement time.

All 96 students participated in at least part of this study, but because data was collected at three different times, only the 56 students who completed all three surveys were included in this analysis, which far exceeds the minimum of ten subjects for a two group repeated measures design (Stevens, 2002, p. 493). These participants included 37 females (66.1%) and 19 males (33.9%) and had a mean age of 18.68 years ($SD = .716$). Students were asked to self-report their ethnicity; 35 (62.5%) were Hispanic, 8 (14.3%) were Asian, 1 (1.8%) was Pacific Islander, 1 (1.8%) was Native American, 1 (1.8%) was White, 6 (7.1%) reported "Other," and 4 (7.1%) preferred not to respond. This course is a required general education course, and the distribution of participants by major was as follows: 7 (12.5%) in the College of Arts and Letters; 5 (8.9%) in the College of Business and Economics; 0 in the Charter College of Education; 2 (3.6%) in the College of Engineering, Computer Science and Technology; 25 (44.6%) in the College of Health and Human Services; 14 (25%) in the College of Natural and Social Sciences; and 3 (5.4%) were undeclared.

Procedures and Instrumentation

Students were assigned to one of two groups based on which sections of public speaking they were enrolled

Table 1
Research Design and Timeline

	T ₁	X ₁	T ₂	X ₂	T ₃
Group 1	SG ₁ , PSA ₁ , CCC ₁ , LI ₁	In-Class Speech Workshop	SG ₂ , PSA ₂ , CCC ₂ , LI ₂ , AL ₂ -In, WV ₂ -In	Out-of-Class Speech Workshop	SG ₃ , PSA ₃ , CCC ₃ , LI ₃ , AL ₃ -Out, WV ₃ -Out
Group 2	SG ₁ , PSA ₁ , CCC ₁ , LI ₁	Out-of-Class Speech Workshop	SG ₂ , PSA ₂ , CCC ₂ , LI ₂ , AL ₂ -Out, WV ₂ -Out	In-Class Speech Workshop	SG ₃ , PSA ₃ , CCC ₃ , LI ₃ , AL ₃ -In, WV ₃ -In

Note: T = time of observation or measurement, X= intervention type, SG = Speech Grade, PSA= Public Speaking Anxiety, CCC= Connected Classroom Climate, LI= Learning Indicators, AL= Affective Learning for Workshop, WV= Perceived Workshop Value

in. Both groups did two peer workshops, one before their informative speeches, and one before their persuasive speeches. Group 1 did an in-class workshop before their informative speech and an out-of-class workshop before their persuasive speech; Group 2 did an out-of-class workshop before their informative speech and an in-class workshop before their persuasive speech.

Except for speech grade, all data was collected using an online survey. Students received course credit for completing the surveys (5 points per survey; the maximum 15 survey points was 3% of the course total). A survey link was sent to students following each of their three speeches, and they were given a week to complete the online survey. Speech grades were collected from the instructors' grade books at the end of the quarter. Table 1 shows the timeline for all measurements and treatments for both groups.

Student learning was measured in three ways. First, we used Frymier and Houser's (1999) Revised Learning Indicators scale (LI), which includes nine items measured with a 5-point scale ranging from Never (1) to Very Often (5). The authors report an overall reliability of $\alpha = .83$ for this scale and include items such as "I actively participate in class discussion" and "I think about the course content outside of class" (p. 8). For our study, the reliability for this scale was $\alpha = .89$ at T_1 , $\alpha = .89$ at T_2 , and $\alpha = .93$ at T_3 .

The second way we measured student learning was by examining students' Affective Learning for Workshop (AL) was measured using a slightly modified version of McCroskey's (1994) Affective Learning Measure. The Affective Learning Measure uses a 7-point bi-polar semantic differential that includes pairs such as "Bad—

Good” and “Valuable—Worthless.” For our study, the four affect toward content measure items were included, but the prompt was changed from “Content/subject matter of the course” to “I feel that the peer workshop experience was” to measure students’ affective learning in the peer workshop that they just completed. McCroskey (1994) reports that the reliability for this measure has ranged from .85 to well above .90. For our study, the reliability for this scale was $\alpha = .84$ at T₂ and $\alpha = .84$ at T₃.

Finally, student learning was measured by students’ speech grades (SG), which serves as a proxy for speech quality. All three speeches were graded by the course instructors using standardized grading rubrics, and all speech grades were converted into a 100-point scale for the purposes of this analysis. All instructors go through several grade-norming exercises that include several rounds of training and grading to establish high inter-rater reliability, ensuring that grades are a fair representation of quality across all sections of the course. The three speeches that students gave included a narrative speech (SG₁), an informative speech (SG₂), and a persuasive speech (SG₃).

Public Speaking Anxiety (PSA) was measured using Booth-Butterfield and Gould’s (1986) State Communication Anxiety Inventory, which includes 20 items measured with a four-point Likert-type scale. The authors report an overall reliability of $\alpha = .91$ for this scale and include items such as, “I felt tense and nervous,” and “My words became confused and jumbled when I was speaking” (p. 199). For our study, the reliability for this scale was $\alpha = .86$ at T₁, $\alpha = .89$ at T₂, and $\alpha = .83$ at T₃.

Connected Classroom Climate (CCC) was measured using Dwyer et al.’s (2004) Connected Classroom Cli-

mate Inventory, which includes eighteen items measured with a five-point Likert scale. The authors report an overall reliability of $\alpha = .94$ for this scale and include items such as, "I feel a strong bond with my classmates," and "The students in my class are supportive of one another" (p. 268). For our study, the reliability for this scale was $\alpha = .93$ at T₁, $\alpha = .97$ at T₂, and $\alpha = .99$ at T₃.

Perceived Workshop Value (WV) was measured using six items using a five-point Likert scale. These items were developed specifically for this study and included the following items: "I received valuable feedback from my peers during our peer workshop," "I enjoyed the peer workshop," "My peers did not provide helpful comments" (reverse-coded), "The peer workshop enhanced my understanding of public speaking," "I was able to use the feedback from my peers to improve my speech," and "The peer workshop was a waste of time" (reverse-coded). For our study, the reliability for this scale was $\alpha = .86$ at T₂ and $\alpha = .88$ at T₃.

RESULTS

Split-plot within-subjects repeated measures analyses were conducted to find out whether there was a difference between the two treatment groups in SG, PSA, CCC, and LI across the quarter. Means for these variables are included in Table 2. Independent samples *t*-tests were used to find out whether there was a difference between groups in AL and WV for each speech. Alpha was set at .05 for all tests.

Table 2
Means for Dependent Variables by Group

	Group 1			Group 2		
	O1	O2	O3	O1	O2	O3
Speech Grade	M=84.12 SD=4.89	M=84.00 SD=6.47	M=88.58 SD=6.70	M=84.63 SD=5.93	M=83.55 SD=11.16	M=86.17 SD=7.81
Public Speaking Anxiety	M=44.00 SD=8.27	M=41.58 SD=9.89	M=38.21 SD=9.67	M=45.71 SD=10.76	M=42.84 SD=10.74	M=40.28 SD=9.86
Connected Classroom Climate	M=72.08 SD=8.44	M=71.71 SD=9.78	M=73.00 SD=18.29	M=68.81 SD=9.18	M=69.06 SD=14.01	M=74.6 SD=10.96
Learning Indicators	M=30.96 SD=6.13	M=30.67 SD=6.09	M=31.63 SD=7.98	M=30.41 SD=6.71	M=30.62 SD=6.13	M=32.03 SD=7.72
Affective Learning	--	M=22.96 SD=4.76	M=22.71 SD=4.61	--	M=21.94 SD=5.65	M=23.00 SD=5.74
Workshop Value	--	M=23.71 SD=4.43	M=22.95 SD=5.29	--	M=22.03 SD=5.19	M=23.47 SD=5.37

Student Learning

A within-subjects split plot analysis was conducted to determine whether LI changed differently between the two groups. Wilk’s Lambda was not significant for LI, $\lambda = .903$, $F(2, 53) = 2.847$, $p = .067$, $\eta_p^2 = .097$, nor for LI by group, $\lambda = .991$, $F(2, 53) = .241$, $p = .786$, $\eta_p^2 = .009$. Tests of between-subjects effects, within-subjects contrasts, and all pairwise contrasts were also insignificant, indicating that there were no changes in LI between or within groups throughout the quarter. An interaction graph depicting the results is shown in Figure 1. Hypothesis 1 was not supported.

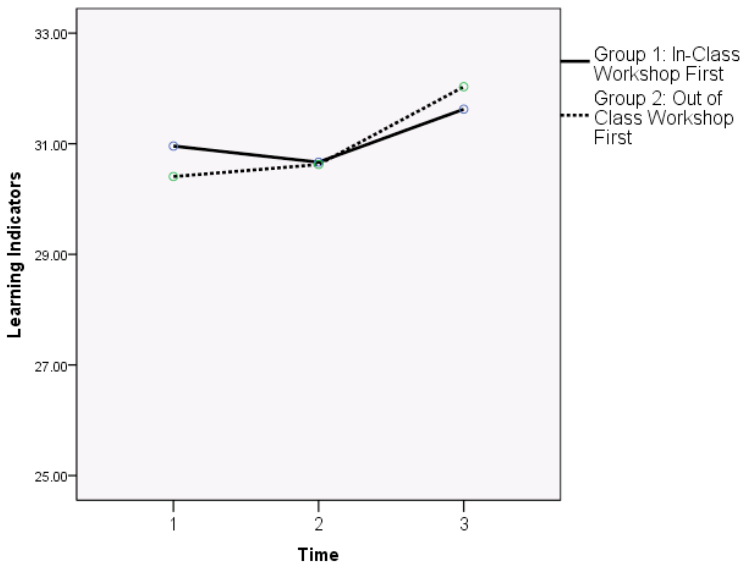


Figure 1: Learning Indicators by Group by Time

Affective Learning

A within-subjects split plot analysis was conducted to determine whether there were any differences in AL between groups or between workshop types. Means and standard deviations are shown in Table 3. Wilk's Lambda was not significant for AL, $\lambda = .964$, $F(1, 54) = 2.017$, $p = .161$, $\eta_p^2 = .036$, nor for AL by group, $\lambda = .986$, $F(1, 54) = .773$, $p = .383$, $\eta_p^2 = .014$. Tests of between-subjects effects were also not significant, $F(1, 54) = .073$, $p = .788$, $\eta_p^2 = .001$. Research Question 1 revealed that there was no difference in AL for students who participate in in- and out-of-class peer workshops.

Table 3
Affective Learning

	Group 1 ($N=24$)	Group 2 ($N=32$)
AL for In-Class Workshop	$M=22.96$, $SD=4.75$	$M=23.00$, $SD=5.74$
AL for Out-of Class Workshop	$M=22.71$, $SD 4.61$	$M=21.94$, $SD=5.65$

Speech Grade

A within-subjects split plot analysis was conducted to determine whether SG changed differently between the two groups. Wilks' Lambda was significant for SG, $\lambda = .840$, $F(2, 53) = 5.057$, $p = .010$, $\eta_p^2 = .160$, but not for SG by group, $\lambda = .971$, $F(2, 53) = .781$, $p = .463$, $\eta_p^2 = .029$. Tests of within-subjects effects were significant for SG, $F(1.989, 205.470) = 4.98$, $p = .009$, $\eta_p^2 = .084$. Between-subjects effects were not significant. Within-sub-

jects contrasts for SG showed a significant linear trend, $F(1, 54) = 1.531, p = .014, \eta_p^2 = .108$, but did not show a significant quadratic trend, $F(1, 54) = 1.531, p = .061, \eta_p^2 = .063$. Pairwise comparisons for Group 1 showed no significant difference in grades for speeches 1 and 2 ($p = .948$), but did show a significant difference in grades for speeches 2 and 3 ($p = .018$) and for speeches 1 and 3 ($p = .015$). There were no significant differences in SG for Group 2. This means that, while there was no significant difference between the groups for the SG or for the overall growth in speech performances, students who did the in-class workshop first and the out-of-class workshop second had greater gains in SG between their second and third speech. Ultimately, Research Question

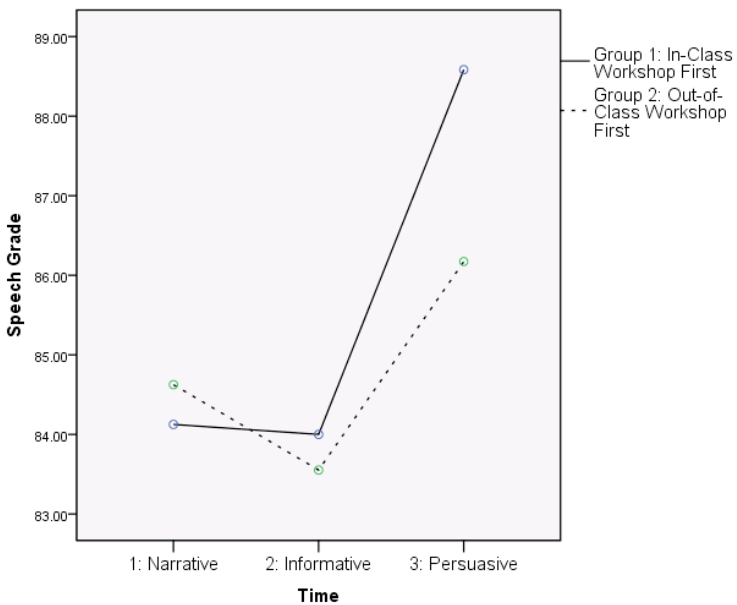


Figure 2: Speech Grades by Group by Time

2 revealed that there is no difference in student SG for each speech depending on which kind of peer workshop is done, but students who do an in-class workshop followed by an out-of-class workshop did experience a significant gain. While these results are not conclusive, they point towards a potential trend; it is beneficial to do the first peer workshop in-class so that students are better prepared to give and receive quality feedback in later out-of-class workshops, whether they are held in- or out-of-class. An interaction graph depicting the results is shown in Figure 2.

Public Speaking Anxiety

A within-subjects split plot analysis was conducted to determine PSA changed differently between the two groups. Wilk's Lambda was significant for PSA, $\lambda = .724$, $F(2, 53) = 10.126$, $p < .001$, $\eta_p^2 = .276$, but not for PSA by group, $\lambda = .998$, $F(2, 53) = .059$, $p = .943$, $\eta_p^2 = .002$. Tests of within-subjects effects were significant for PSA, $F(2, 108) = 10.608$, $p < .001$, $\eta_p^2 = .164$. Between-subjects effects were not significant. Within-subjects contrasts for PSA showed a significant linear trend, $F(1, 54) = 20.443$, $p < .001$, $\eta_p^2 = .275$, but did not show a significant quadratic trend, $F(1, 54) = .953$, $p = .877$, $\eta_p^2 < .001$. Pairwise comparisons for Group 1 showed no significant difference in PSA between measurements 1 and 2 ($p = .203$) or between measurements 2 and 3 ($p = .063$), but did show a significant decrease between measurements 1 and 3 ($p = .003$). Likewise, pairwise comparisons for Group 2 showed no significant difference in PSA between measurements 1 and 2 ($p = .082$) or between measurements 2 and 3 ($p = .102$), but did show a signifi-

cant decrease between measurements 1 and 3 ($p = .002$). Research Question 3 revealed that, while there was no significant difference between groups, all students reduced their PSA by the end of the quarter. An interaction graph depicting the results is shown in Figure 3.

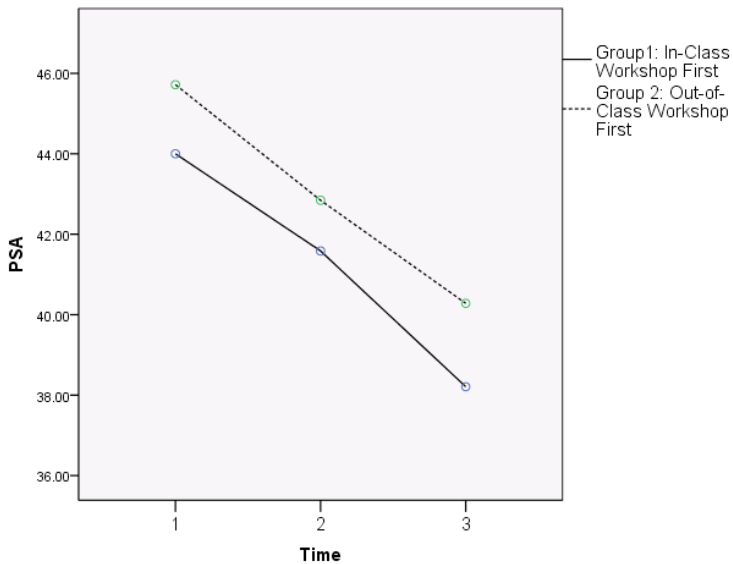


Figure 3: Public Speaking Anxiety by Group by Time

Connected Classroom Climate

To explore Research Question 4, a within-subjects split plot analysis was conducted to determine whether CCC changed differently between the two groups. Wilk’s Lambda was not significant for CCC, $\lambda = .909$, $F(2, 53) = 2.640$, $p = .081$, $\eta_p^2 = .091$, nor for CCC by group, $\lambda = .955$, $F(2, 53) = 1.239$, $p = .298$, $\eta_p^2 = .045$. Between-sub-

jects effects were not significant. There was no significant quadratic trend, but there was a slight but significant linear trend, $F(1, 54) = 4.160$, $p = .046$, $\eta_p^2 = .072$. There were no significant differences in CCC for Group 1 among the three data collection times, but for Group 2, CCC was significantly higher at measurement 3 than it was at either measurement 1 ($p = .009$) or measurement 2 ($p = .016$). This means that the second group has a significant increase in CCC after doing the in-class workshop. However, it is noteworthy that CCC levels were already fairly high by the time that students gave their first speech, so it is likely that the classroom interactions during the first few weeks of class do more to influence CCC than do either kind of peer workshop. An

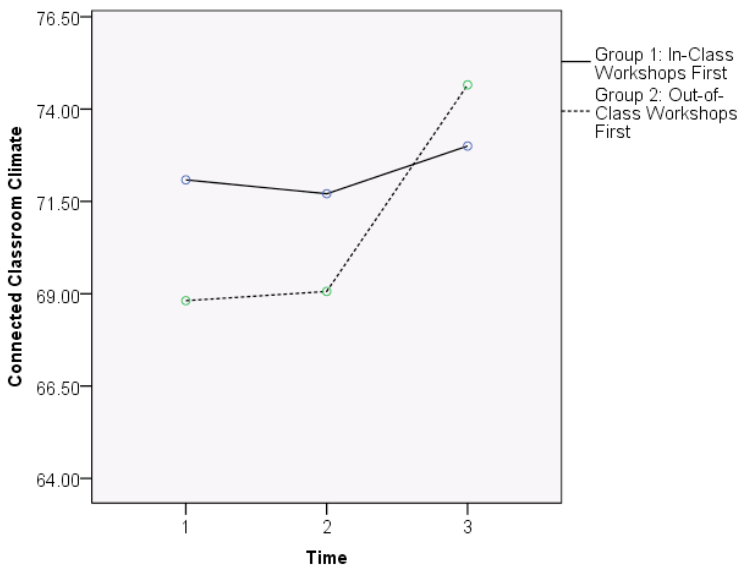


Figure 4: Connected Classroom Climate

interaction graph depicting the results is shown in Figure 4.

Perceived Workshop Value

Next, to answer Research Question 5, a within-subjects split plot analysis was conducted to determine whether there were any differences in WV between groups or between workshop types. Wilk's Lambda was not significant for WV, $\lambda = .946$, $F(1, 54) = 3.065$, $p = .086$, $\eta_p^2 = .054$, nor for WV by group, $\lambda = .994$, $F(1, 54) = .303$, $p = .584$, $\eta_p^2 = .006$. Tests of between-subjects effects were also not significant, $F(1, 54) = .225$, $p = .638$, $\eta_p^2 = .004$. This means that there is no significant difference in the perceived value of the in-class and out-of-class peer workshops.

Table 4 summarizes the means, standard deviations, and student preferences for the workshops. Together, these tests indicate that there is no clear difference be-

Table 4
Perceived Workshop Value

	Group 1 (N=24)	Group 2 (N=32)
Workshop Value for In-Class Workshop	$M=23.71, SD=4.43$	$M=23.47, SD=5.37$
Workshop Value for Out-of-Class Workshop	$M=22.96, SD=5.29$	$M=22.03, SD=5.19$
Percent that Prefer In-Class Workshops	58.3% (N=14)	78.1% (N=25)
Percent that Prefer Out-of-Class Workshops	41.7% (N=10)	21.9% (N=7)

tween in-class and out-of-class workshops in terms of how much students enjoy them or how much benefit students believe they obtain from the workshops. However, when students were directly asked which type of workshop they prefer, both groups preferred an in-class peer workshop to an out-of-class peer workshop. This preference was even stronger for the group that did the out-of-class workshop first. It is possible that this is an indication that those who did an in-class workshop first felt better prepared and were able to give and receive helpful feedback during the subsequent out-of-class workshop.

DISCUSSION

The goal for this study was to determine the effectiveness of peer workshops towards helping students prepare for public speaking presentations. Specifically, it examined if students' SG, PSA, CCC, LI, and WV differed depending on whether students' engaged in out-of-class or in-class peer workshops. The findings from this study offer several implications for students, teachers, and administrators involved in the basic communication course and courses with a presentational speaking component.

First, the results revealed that conducting peer workshops, regardless of context, can benefit students as they prepare for presentations. This finding reinforces Broeckelman-Post et al.'s (2011) research which found that those students who participated in peer workshops saw improvements in the quality of their speeches over the course of semester. Further, results suggest a trend towards conducting in-class workshops

before out-of-class workshops because students have greater gains on presentation grades. Upon examining the data, it appears that students' grades improved between the second and third presentations and from the first presentation to the third when they participated in in-class workshops and then out-of-class workshops. A possible explanation for that may be that conducting the first peer workshop in-class allowed students to more fully engage in the workshop modeling exercise and, as a result, they were able to give and receive effective peer feedback. Then later in the term, when students were ready to do an out-of-class workshop, they had experience and were more confident in their own and their peers' ability to give trustworthy and constructive feedback. These findings echo previous research which suggests that when students receive feedback and rationales for suggested improvements from multiple sources, they are able to integrate and apply it towards their work (Cho & MacArthur, 2010; Gielen, et al., 2009). It is also possible that students who had participated in in-class workshops earlier in the term had stronger relationships with their peers and trusted each other (and each other's feedback) more since they had already had an opportunity to engage in face-to-face conversations about previous presentations. This finding makes sense given other research that points to a positive peer climate improving student outcomes (Frisby & Martin, 2010) and in turn this positive climate predicts academic success, efficacy, and connectedness (Nelson & DeBacker, 2008).

From these findings, it appears that workshops have a greater impact after students have given their first major presentation in a course (in this case, the In-

formative Speech, which is the first time that external sources, structured outlines, and clear transitions are incorporated). In part, this finding can be explained through Bloom's (1971) mastery learning approach. When using a mastery learning approach, students are provided instruction on course content, assessed on the knowledge and skills they have learned, and given specific feedback on areas they must master in order to meet the learning outcomes for the targeted task. Students are then reassessed using a similar activity to determine whether the feedback successfully helped student improve their performance. In a similar vein, students in the current study acquired knowledge about the speech making process through course instruction, delivered their first major presentation, and received feedback on their performance. The students then engaged in subsequent presentations in the course. In terms of the workshop timing, the second round of in-class then out-of-class workshops may have been more beneficial towards grade gains because students' understood the workshop purpose and structure and had targeted suggestions for areas of improvement from their previous presentations to reference during the workshop. Ultimately, teachers should find these results encouraging and reinforce their choice to allocate days in the curriculum for structured presentation workshops.

Second, PSA was reduced for all students in the study by the end of the course. This finding is consistent with previous literature that highlights the important role oral communication courses play in reducing students speaking anxiety (Hancock, Stone, Brundage, & Zeigler, 2010). In the current study, it appears that the reduction in speech anxiety can be traced to involve-

ment in the course over time rather than participation in the peer workshops. Although peer workshops did not reduce speaking anxiety, the workshop approach remains an important pedagogical method because they serve as another tool to improve students' presentational speaking competence (Falchikov, 2000; Smith, 2002) and engage in habituation, performance feedback, and skills based training, which have been shown to reduce state PSA (Finn et al., 2009; McCroskey, 2009).

Third, results suggest no significant differences for workshop type and student learning or workshop value, but speech quality appears to improve as a result of peer workshops. Ultimately, this may illustrate the ways in which peer workshops are uniquely suited for basic courses and courses with a presentational speaking component. To implement these findings in their basic courses, instructors should discuss with students how the peer workshop demonstrates, reinforces, and extends course content. In doing so, students will build schematic relationships between and among course content they have or will learn throughout the course and potentially increase the perceived value of the workshop.

Finally, students who did the out-of-class workshops first reported greater growth in CCC than students who participated in in-class workshops first. However, it is noteworthy that there was no significant difference between the groups in CCC at any point time, which suggests that other elements of the class are probably influencing the classroom climate more than the peer workshops. CCC was at a fairly high level at the first data collection point and increased for both groups, showing that students felt closer to and more supported

by one another as the course progressed in both groups. Students in the current study had positive feelings of rapport with their classmates at the end point in the academic term, which has been shown to increase participation, student-student interaction, and reduce anxiety (Coupland, 2003; Frisby & Myers, 2008). For these students, CCC may have been cultivated throughout the course by the instructor and students. In this sense, the peer workshops may have only served to reinforce existing feelings of connection, or it is possible that both kinds of workshops are impacting classroom climate to the same degree.

Practical Implications

The results of this study give rise to several important implications for faculty, staff, and students involved in courses that have a presentational speaking component. Perhaps most importantly, the findings suggest that conducting peer workshops can increase the quality of students' speeches and presentational competencies. This finding should be encouraging to faculty whose courses involve oral presentations. In all, our research provides a rationale and support for allocating time in the curriculum for peer workshops because they improve students' presentation grades and increase perceptions of connected classroom climate. To increase the value of these peer workshops and increase student learning, faculty should provide students with a list of tasks that should be completed during the workshop and explain (or have students explain) during a debriefing exercise how the workshop experience demonstrated previously learned course content. Likewise,

students should leave the workshop experience with feedback that will help them improve their presentation skills.

Limitations and Future Research

As with all research, it is important to examine the results of this study within the context of its limitations. First, although 56 students successfully completed all three sets of assessments, this sample size was relatively small. Despite the fact that the current sample size did exceed expectations for repeated measures designs (Stevens, 2002), a larger sample size would further increase confidence in the research findings. Second, two-thirds of the participants were female and the age of the participants was rather homogeneous. While this is fairly representative of the age and sex demographics on most college campuses, it might be valuable to find out whether the workshop experience has different effects depending on the age and sex of the students. Third, the study did not include a control group since previous research (Broeckelman-Post et al., 2011) found that students who participated in peer workshops had stronger gains in speech quality than those that did not participate in peer workshops, nor did this study include students who participated in two in-class workshops or two out-of-class workshops. Future research should consider incorporating all of these elements into a single design. The Perceived Workshop value measure was created for this study, and future researchers should continue to use this measure to further test its reliability and validity. Future studies should examine the kinds of feedback that students give

and receive during in and out-of-class workshops to find out whether there is a qualitative difference in comments shared amongst peers. Additionally, the present study did not examine the structure and process of the in-class and out-of-class workshops; future researchers will want to explore this to determine what impact, if any, it has on student learning, classroom climate, and speech anxiety.

CONCLUSION

Ultimately, this study suggests that there are benefits for including peer workshops in communication courses. In- and out-of-class workshops offer similar benefits for students, so instructors who are pressed for time should be confident that either type of workshop will be helpful. However, students prefer in-class workshops, and previous literature suggests that the training that can more easily accompany in-class workshops might have benefits for helping students learn to provide more constructive feedback. Because of this, we suggest including an in-class workshop early in the academic term if possible to give students a chance to build relationships and feedback skills before conducting out-of-class workshops.

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