Peer-based Learning in Reporting Class

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Abstract

Supplemental instruction (SI) is a peer-guided non-remedial academic support program that has proved valuable in a range of college courses and for historically underrepresented (HU) students. Its value for undergraduates in STEM courses is well established, and increasingly, researchers are documenting that value in other disciplines. This study extends SI to a reporting course offered by a journalism program at a large urban institution. The program identified the course as high risk, with 22 percent of students failing and a 15 percent achievement gap between HU and non-HU students. This study considers the impact of SI on 76 students via pre- and post-tests, final grades, and exit surveys over two consecutive semesters. Results reveal formal supplemental instruction is a factor in student success, with no students who attended SI more than twice failing, and those who attended more sessions experienced additional gains. Still, only half of all students opted to attend SI.

Introduction

For some journalism students, the 300-level reporting course – or its closely named and numbered equivalent – is where dreams of lifelong professional success fall apart. While the specifics of reporting courses vary, the pain points for students (and their instructors) are relatively the same: mastering basic grammar and style, generating story ideas, developing sources, and the ever-challenging talking to people. The exercise of putting these elements into play with the fundamentals of news judgment, ethics and the law, and writing can sometimes lead to subpar work and missed assignments. For many students, lessons learned from timed writing exercises and AP-style quizzes in earlier courses fall by the wayside; for others, there is the realization that those lessons were not enough.

In many respects, reporting is the journalism program's equivalent of a gateway course, one of those universal high-risk classes required to progress through a major and attain the skills and know-how to succeed professionally. University administrators and educators work to identify high-risk courses, which impede graduation rates (Arendale, 2002). Typically, administrators look for courses with elevated D, F, W (any form of withdrawal) and I (incomplete) grades earned across sections (Koch & Rodier, 2014). Failure rates vary by department and institution; however, they universally represent a roadblock to student success, particularly among lower-income, first-generation, and historically underrepresented (HU) groups (African American, Hispanic/Latino, Native American, Pacific Islander) (Koch, 2017). Academic departments rarely need high-risk classes to be identified. Most instructors are well aware of which courses act as barriers to students. The greater need is to know how to motivate students through these foundational classes and help them succeed.

Institutions and educators are increasingly looking to supplemental instruction (SI), a peer-guided

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non-remedial academic support program that emerged in the 1970s (Arendale, 2002). SI targets high-risk courses, not "at-risk" students (Blanc *et al.,* 1983; Martin & Arendale, 1993; Oja, 2012, p. 344), meaning all students – from high performers to those struggling – are encouraged to attend weekly sessions designed to complement these courses. Unlike labs and writing or learning centers, there are no teaching assistants or graduate students. Rather, experienced undergraduates (i.e., students who completed the course successfully) lead SI sessions, typically employing peer-based activities to support coursework. The expectation is that all students participating in an SI section can benefit from the embedded curriculum model (Simpson, Hynd, Nist, & Burrell, 1997). To date, more than 1,500 educators from 30 countries have implemented this learning approach on their campuses (International Center, 2020, n.p.).

Institutions and scholars have demonstrated SI's value for students enrolled in STEM courses and are establishing that value for other disciplines such as second languages and English composition (Smith, Morris, Hirsch, & Coglianese, 2017; Longfellow, May, Burke, & Marks-Maran, 2008). Researchers have credited SI with significant drops in students not completing the course (DFWs), and with grade gains of up to one letter grade (Eroy-Reveles, Hsu, Rath, Peterfreund, & Bayliss, 2019). Yet, a gap remains regarding the value, if any, of SI for journalism courses.

This study considers one SI effort designed to accompany a reporting course offered by a journalism program at a public urban institution with a large HU student population. The program identified the course as high risk, with typically 22 percent of enrolled students dropping, withdrawing, or failing – a consistent percentage for the previous 10 years. ("Failing" is defined as below 73 percent.) Additionally, the course regularly experienced a 15 percent achievement gap among HU students. This study begins to address this gap by considering course and student data (e.g., entrance and exit exams, final grades, exit surveys, and demographics) over two consecutive semesters. It presents lessons learned and pedagogical implications, as well as highlights opportunities for future research.

Literature Review

The University of Missouri-Kansas City first formally developed SI and then established a center to share the approach as a way for institutions to address "high attrition rate[s] among students enrolled in profes-

sional schools" (Arendale, 2002, p. 21). SI stands apart from traditional tutoring in that it is grounded in the belief that all students have the potential to grow their academic skills and share their talents with one another in a way that improves academic outcomes (Cross, 1976). As such, SI is offered to each student within a class, not just those identified as struggling or underperforming (Oja, 2012).

Multiple approaches exist for implementing SI, and institutions and programs customize it for their own student needs; however, several touchstones persist. Notably, SI encourages students to consider their academic success by integrating "what to learn" with "how to learn" (International Center, 2020, n.p.). Once a course has been identified as high risk, a set of SI out-of-class group sessions are designed, driven by student needs and implemented in consultation with academic staff (International Center, 2020). Sessions are regularly scheduled, typically voluntary, and led by undergraduates trained as peer leaders. SI leads may be tasked with the role of model student, attending lectures, taking notes, reading assigned materials, and demonstrating good study skills (Dawson *et al.,* 2014). Students attending SI sessions are expected to collaborate by teaching one another and working through concepts and challenges from the class (Dawson *et al.,* 2014).

Over the last three decades, researchers have documented successful implementations of SI. The International Center for Supplemental Instruction (2017) reported that students who participated in a course with SI support had, on average, a 13 percent reduction in DFWs. Data from the center and elsewhere have shown that students in general and HU students in particular who enrolled in STEM courses and attended SI sessions reported higher course grades and learned study skills (Hsu, Murphy, & Treisman, 2008; Treisman, 1992). Notably, Eroy-Reveles *et al.* (2019) found that performance levels for HU students participating in SI often surpassed their peers who did not use SI. Peterfreund *et al.* (2008) reported that over a 13-year period, HU students enrolled more frequently in SI than other students and exceeded the achievement of both non-SI students and non-HU students. Women participated in SI the most; however, men demonstrated more dramatic improvement (Eroy-Reveles *et al.,* 2019).

Collectively, results from STEM courses are promising and present large samples of students (e.g., 7,451 undergraduates, with 18 percent also partici-

pating in SI) (Eroy-Reveles *et al.,* 2019). However, STEM courses are typically characterized by large classes with several hundred students and present "little opportunity to interact with the professor, voluntary or unrecorded class attendance, and infrequent examinations that focus[ed] on higher-order cognitive skills" (Eroy-Reveles *et al.,* 2019, p. 218). As such, findings from these studies offer little insight into how SI might benefit students in non-STEM and smaller courses such as those found within an accredited, skills-based journalism program, where class enrollment is capped at 20 students.

However, some programs and institutions are extending SI into the realm of liberal arts, but data remains limited, relatively dated, and derived from small student populations. Wolfe (1987) highlighted an early implementation of SI into a 200-level history course with 41 students. SI participation contributed to lower DFW rates (16% vs. 55%) and higher final grades (2.5- vs. 1.6-point increase), despite SI participants having lower SAT scores (Wolfe, 1987). Also, SI participants reported higher course satisfaction (4.5 on a 5-point Likert scale) having participated in the SI program (Wolfe, 1987). In an introductory political science class with 248 undergraduate students at a large four-year university, researchers showed SI to have both short-term impact (i.e., course-grade increase) and longer-term impact (i.e., GPA increase in subsequent semester) on conditionally accepted students (Ogden, Thompson, Russell, & Simons, 2003). However, students did not sustain the overall GPA increase past one academic year (Ogden *et al.,* 2003).

While research on SI in journalism courses appears nonexistent, several studies have considered English composition courses and one explored a creative media production course. Findings from these courses could inform the application of SI to journalism classes. Court and Molesworth (2008) surveyed 34 students enrolled in a creative media production course and participating in a peer-assisted learning program (Dawson *et al.,* 2014). The researchers found that 70 percent of students credited SI with giving them a "good understanding" of course expectations (Dawson *et al.,* 2014, pp. 629-630). In addition to improving student learning generally, Longfellow *et al.* (2008) found that SI aided participants in assessing their writing skills.

Dawson *et al.* (2014) noted in a meta-analysis of 29 studies evaluating the effectiveness of SI that researchers rarely controlled for student motivation (as distinct from prior academic achievement) and that students typically self-selected into SI. Thus, participants may have been more motivated to succeed. The role of SI attendance in course success also surfaced as a factor needing additional research, though student attendance of four or more SI sessions appeared as a threshold for improving final grades in a course (Dawson *et al.,* 2014). Related to attendance is the notion of whether or not SI should be required for certain courses or certain students. A long-held tenet of SI is that requiring attendance would undercut student motivation and success (International Center, 2020, n.p.). However, as Martin and Arendale (1993, p. 42) explained, often "the students who need help the most are least likely to request it." As such, several institutions have experimented with required (Hodges *et al.,* 2001) and partially required SI (i.e., students who sign up for a course section with SI must attend) (Eroy-Reveles *et al.,* 2019).

Finally, institutions and researchers report SI success coming at a cost and potentially built on bias. Programs and institutions find financing and incorporating SI into departments and institutional structure difficult (Eroy-Reveles *et al.,* 2019). As Fullilove and Treisman (1990) explained, external funding ends, then SI offerings decline, followed by drops in student participation and success rates. Additionally, Dawson *et al.* (2014), raised the issue that much of the research stemming from SI has come from authors employed in a role involving SI and, thus, could be biased toward more positive results.

The research presented here is undergirded by a social constructionist framework drawing from Vygotsky (1962; 1978) and Piaget's (1962) theories. For Vygotsky, "groups construct knowledge for one another, collaboratively creating a small culture of shared artifacts with shared meanings" (Vygotsky, 1978, pp. 56-57). Piaget looked more to the individual but valued "cognitive conflict" through social interaction (i.e., individuals coming into contact with those who have differing views) (Zerger, 2008). Researchers (Ladyshewsky & Gadner, 2008) have utilized these frameworks in a complementary fashion, extending Vygotsky's framework to "spaces of influence" (Hurley & Gilbert, 2008) that encourage individuals to learn through the support of others. Within these spaces, students work as experts to provide scaffolding to help peers move toward their next level of development (Falchikov, 2001). With SI, this effort can lead to encouraging cognitive conflict among students as a

way to push them toward greater critical thinking. For the last four decades, institutions and educators have built their SI efforts on these foundational learning theories (Jacobs, Hurley, & Unite, 2008).

This study examines the use of SI alongside a reporting course with a high DFW rate and considers how SI might be used more broadly in journalism classes, a previously unresearched realm. As such, the following research question was the basis for this study:

> RQ1: How, if at all, did SI affect academic outcomes and perceived learning experiences among students who opted to attend SI sessions during the semester of their enrollment in reporting?

Setting

This study took place at one of the nation's most ethnically and culturally diverse campuses. Among the university's nearly 30,000 students, approximately 70 percent transferred in and 43 percent were from federally designated underrepresented ethnic minority (URM) groups (American Indian/Alaska Native, Black/African American, and Latinx). Of the student population, 32 percent identified as Latino, 25 percent as Asian, 21 percent as White, 5 percent as African American, and 5 percent as having two or more ethnicities. In terms of economic diversity, 78 percent of full-time undergraduates received some kind of need-based financial aid, with 42 percent receiving Pell grants. Seventy-eight percent of students worked part- or full-time during the academic year to help cover the costs of their education and most commuted to campus for classes. Thirty-two percent of first-time freshmen were first-generation college students from families in which neither parent attended college. Students in the ACEJMC-accredited journalism program, 339 totals (Spring 2019), mirrored this diversity.

Reporting Course

Three to six sections of reporting, a major and minor requirement, were offered each semester. The course stressed news gathering, developing sources, interviewing, and writing and required that students report on the area's neighborhoods. In addition to an emphasis on developing the technical skills needed for quality reporting, this course emphasized ethical and legal considerations that confront journalists. Typically, each student was required to produce ten

750-word news stories, in addition to both a longer profile and a final news feature. A consistent group of senior lecturers and faculty members taught the course using a shared syllabus.

SI Implementation

During Fall 2018, the department piloted SI, with three 60-minute student-led sessions scheduled weekly before or after each reporting section. This setup continued in Spring and Fall 2019, and students could opt to attend any number of SI sessions. SI was promoted through departmental emails, class announcements, and hallway posters. Additionally, students could meet with an SI lead during the equivalent of weekly office hours. SI sessions started the third week of classes (after the deadline to easily withdraw) and ran through finals week, for a total of 11 weeks. SI leads recorded attendance in their sessions and office hours. Students were not incentivized to attend (e.g., extra credit), and class attendance varied from 2 to 17 students. Instructors were not informed of a student's SI participation (to avoid grade bias).

All SI leads were journalism majors and had completed both reporting and a semester of student publications with an A and strong faculty recommendations. One of two SI leads from Fall 2018 and then Spring 2019 had worked for a year as an SI lead at his community college. In Spring 2019, the same SI leads continued through the semester; and in Fall 2019, two new SI leads were hired as replacements, as the previous leads graduated. A faculty member volunteered to oversee SI and received no payment or release time for the effort. Prior to the start of the study, the faculty member gained SI certification through the International Center for Supplemental Instruction at UMKC and received training from California State University, Fullerton's SI program. Each semester, the department requested and received $3,000 to $4,000 in funding from the university's Undergraduate Education and Academic Planning to pay the SI leads $15 an hour, the on-campus rate for undergraduate tutors. The SI leads collectively worked 15 to 20 hours a week with expected spikes during final exams.

Each week, the SI leads met as a group and individually, as needed, with the faculty member. At the start of a semester, they completed a three-hour training through the university's tutoring center and worked with the adviser to set up and then maintain a shared online resource. The site housed learning materials such as AP quizzes, how-to videos made by

the faculty, and group-learning activities that could be used in an SI session or shared with students for use outside of a session. Additionally, SI leads met with the reporting instructors at least twice a semester and sat in on the reporting classes as needed.

Methodology

This study was a quasi-experimental design, as randomly assigning students to either an SI or non-SI group was neither possible nor ethical (i.e., risk of denying SI to students wanting such help and forced class assignments). As is common with such a design, a pre- and a post-test were implemented (Price, Jhangiani, & Chiang, 2015). All reporting students took a pre-test (i.e., entrance exam) and a post-test (i.e., exit exam). SI participants, defined as any student who reported attending an SI session *at least* once, received "treatment" (i.e., SI sessions). The question, as Price *et al.* explained, "is not simply whether participants who receive the treatment improve but whether they improve *more* than participants who do not receive the treatment" (Price *et al.*, 2015, n.p.). To further consider this question, academic records (community college coursework, cumulative GPA), demographics (race/ethnicity, gender), and final grades were considered.

Data included a confidential exit survey completed by students in their reporting class. Via Qualtrics, students answered different questions based on whether or not they participated in SI. Most questions measured attitudes about SI using a five-point Likert scale (5 = "strongly agree," 1 = "strongly disagree"); two questions prompted for open responses. Students who participated in SI were prompted to respond to 14 questions, including *SI sessions helped me improve my grade in Reporting ..., SI sessions gave me a sense of community ...,* and *SI sessions helped me with study habits....* Students who did not participate in SI were asked five questions, including *If you NEVER participated in SI, why not?* and *Had you the semester to do again, would you participate in SI?*

Students who did not complete the survey were excluded from the study. Self-reported participation in SI was cross-checked against SI attendance records; inconsistent records were dropped from the data set. Unless otherwise noted, outcomes and survey responses from both Spring 2019 and Fall 2019 comprised the data set. Some survey responses lacked full name and student ID (SID) and could not be identified. Descriptive statistics are presented (R Core Team, 2019; Wickham, 2017), as the number of students participating from each reporting section is small and meaningful significance levels (p values) were not possible.

Results

Population and participation: Overall, 76 percent of the 100 students enrolled in a reporting section participated in the study during either Spring or Fall 2019. Among these students, 52.6 percent participated in SI. In Spring 2019, 43 students (82.7 percent) participated in the study; and in Fall 2019, overall enrollment in reporting dropped by 10 students (7.5 percent) and SI participation fell to 33 students (68.8 percent). More generally, 40 percent of all reporting students, including those who did not participate in the study, attended SI sessions at least once or twice (see Table 1).

SI impact on reporting pass rates: A higher percentage of SI participants passed reporting than non-SI par-

Table 1.
Student population, with students
by section and SI-participant status

	Non-SI	SI	Study participants	Section enrollment (study participation)
Spring 2019				
Reporting 300-01	6	7	13 (68.4%)	19 (100%)
Reporting 300-02	10	7	17 (85%)	20 (100%)
Reporting 300-03	2	11	13 (100%)	13 (100%)
Semester total	18	25	43 (82.7%)	52 (100%)
Fall 2019				
Reporting 300-01	8	5	13 (68.4%)	19 (100%)
Reporting 300-02	8	2	10 (71.4%)	14 (100%)
Reporting 300-03	2	8	10 (66.7%)	15 (100%)
Semester total	18	15	33 (68.8%)	48 (100%)
Grand total	36	40	76 (76%)	100 (100%)

Figure 1. SI Impact on Reporting Pass Rates

Pass/Fail Counts by Group

Pass/Fail Counts by SI Participation
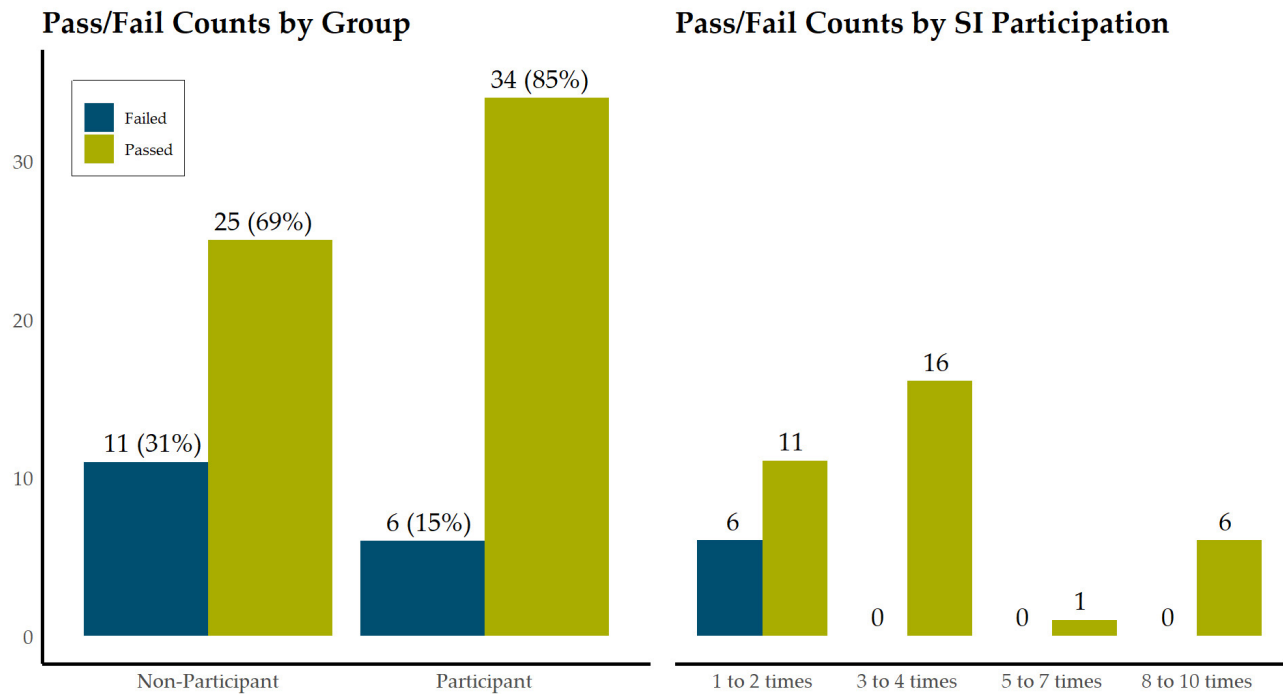
ticipants (see Figure 1). Among students who did not participate in SI, 31 percent failed reporting, while only 15 percent of those who participated did so. Among SI participants, that represented a seven-percentage-point drop below the 10-year failure rate of 22 percent for reporting. However, the combined failure rate of both SI participants and non-SI participants remained 22 percent.

Of study participants, students who failed reporting generally had cumulative GPAs in the C- to C+ range, while those who passed generally had cumulative GPAs in the B range. However, no student who attended an SI session more than twice failed, and most of these students opted to attend three to four SI sessions during a semester, raising their final exam score by, on average, a full letter grade. Among SI participants, 15 percent made SI a habit, attending eight to 10 sessions during a semester, and raising their final exam score by, on average, nearly two letter grades (discussed below). Students participating in SI during Spring 2019 passed reporting at a higher rate than their Fall 2019 counterparts (58 percent versus 45 percent) (see Table 2).

Nearly 70 percent of all reporting students enrolled were transfer students. These students appeared less prepared academically: 74 percent of transfer students (SI and non-SI) passed the course, while 87 percent of freshman starters (SI and non-SI) did so.

However, SI appeared to help transfer students succeed in reporting: 82 percent of transfer students who attended SI passed, while only 64 percent of transfer, non-SI students did. Females opted to participate in SI at a much higher rate than males: 62 percent versus 38 percent. Overall, 80 percent of females passed reporting, while 75 percent of males did so.

SI impact on final exam scores: As might be expected, entrance exam scores varied greatly, with students entering reporting with differing levels of academic preparation and content knowledge (range: 19 points minimum, 90 points maximum). However, final exam scores showed less variation (range: 33 points min-

Table 2.
SI Participation and pass/fail counts by term

	Failed	Passed	Total participation by term
Non-participant			
Spring 2019	6	12 (66.7%)	18 (42%)
Fall 2019	5	13 (72.2%)	18 (55%)
Participant			
Spring 2019	3	22 (88%)	25 (58%)
Fall 2019	3	12 (80%)	15 (45%)

Figure 2. Entrance and Exit Exam Scores

The top (*x*-axis) histogram shows the distribution of entrance exam scores, the right (*y*-axis) histogram the distribution of exit exam scores. The following equation models final exam score as a function of entrance exam and SI participation: Final exam = 38 + 0.56 (entrance exam) + 5.82 (SI participant$_{Participant}$) + ϵ.
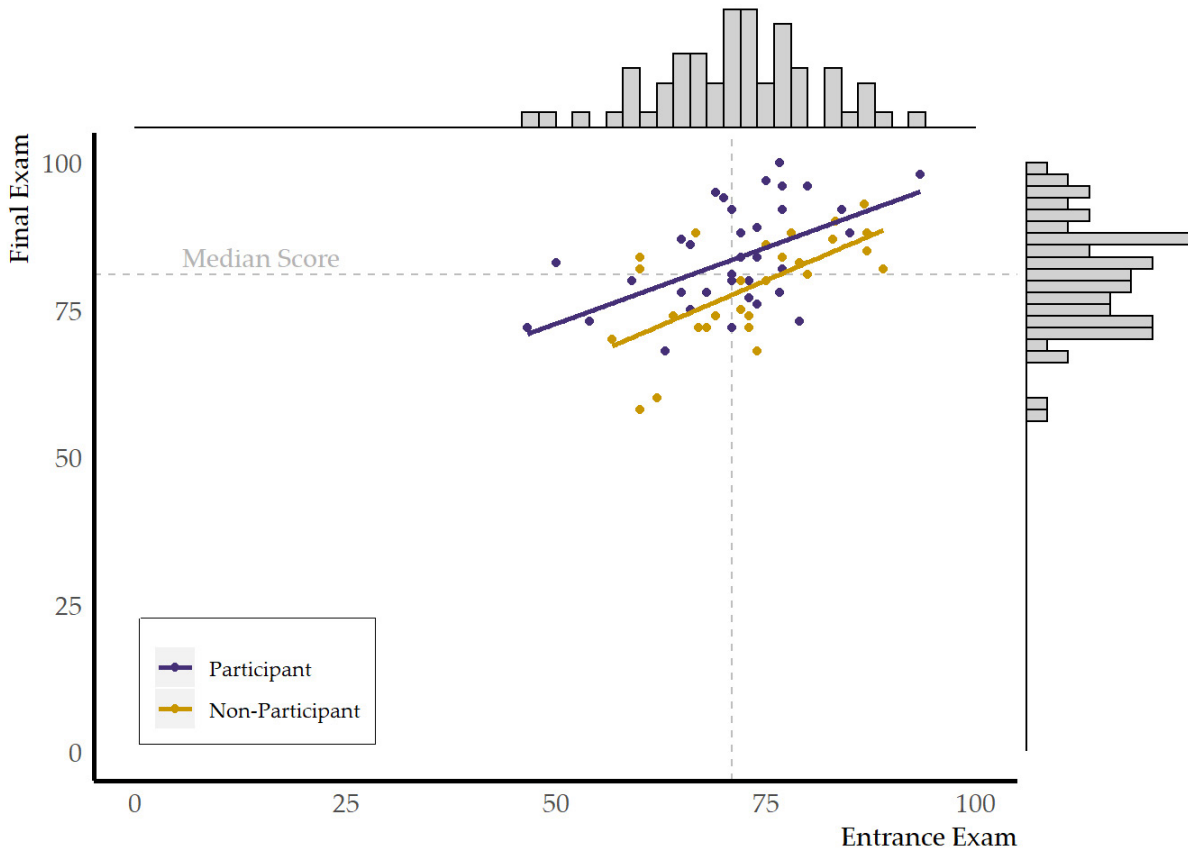
imum, 94 points maximum), with scores regressing toward the mean (i.e., as students became more familiar with course content). Additionally, as Figure 2 shows, there were no signs of grade inflation and grading was as expected (i.e., normal distribution). The distribution of entrance and exit exam scores suggest that high-achieving students attended SI along with lower-achieving students.

The more SI sessions a student attended, the more their final exam score improved. When controlling for entrance exam scores, SI participants, on average, scored almost six points higher than non-participants on the final exam (see Figure 3). Frequent participants of SI saw the greatest improvement, increasing their final exam scores, on average, by 19 points (nearly two letter grades). Among SI participants, the median exam-score improvement was 10, while among non-participants it was 4.5. That translated to a one-letter grade improvement for SI participants on their final exams, which comprised 15 percent of students' final grades (entrance exam scores did not

count toward grades).

SI and HU and first-generation students: Overall, students from families with college experience (e.g., parents attained college degrees) attended SI more than first-generation students (90 percent versus 10 percent). In terms of addressing the ongoing achievement gap between HU and non-HU students, the results were mixed. HU students who participated in SI failed reporting at a much lower rate: 5.9 percent versus 21.7 percent for non-HU participants. HU students who did not participate in SI failed at a much higher rate: 38.5 percent. However, only 42 percent of HU students participated in SI, while 57 percent of non-HU students did. Additionally, students eligible for Pell grants also attended SI less than other students: 38 percent versus 62 percent (see Table 3).

Student perspectives on SI: Overall, students reported finding value in SI through their survey responses (N = 76). Among students who attended SI (n = 40), most either strongly agreed (67.5 percent) or agreed (10 percent) that they would recommend SI to other

students; however, 17.5 percent were neutral on the matter and 2.5 percent disagreed. Students strongly agreed (67.5 percent) or agreed (12.5 percent) that they would sign up again, though 15 percent responded neutral and 2.5 percent disagreed. Students responded favorably to peer leads, strongly agreeing (70 percent) or agreeing (5 percent) that they helped them succeed, though 20 percent responded neutral and 2.5 percent disagreed.

Top survey responses included "SI sessions helped me" develop a sense of community, seek sources, improve study habits, report a story, study for the final, write in a journalistic style, and plan a story. However, Spring 2019 survey scores for these aspects declined across every category in Fall 2019. The decline was most notable in response to three questions: SI sessions gave me a sense of community, SI sessions helped me identify and seek out sources, and SI sessions helped me with study habits (see Figure 4).

Most students (63.2 percent) reported that had they the semester to do over, they would have participated more in SI. "Too busy" was the most frequent reason study participants (47.4 percent) gave for not participating or participating more in SI, followed by forgetting it was available (3.9 percent), and not
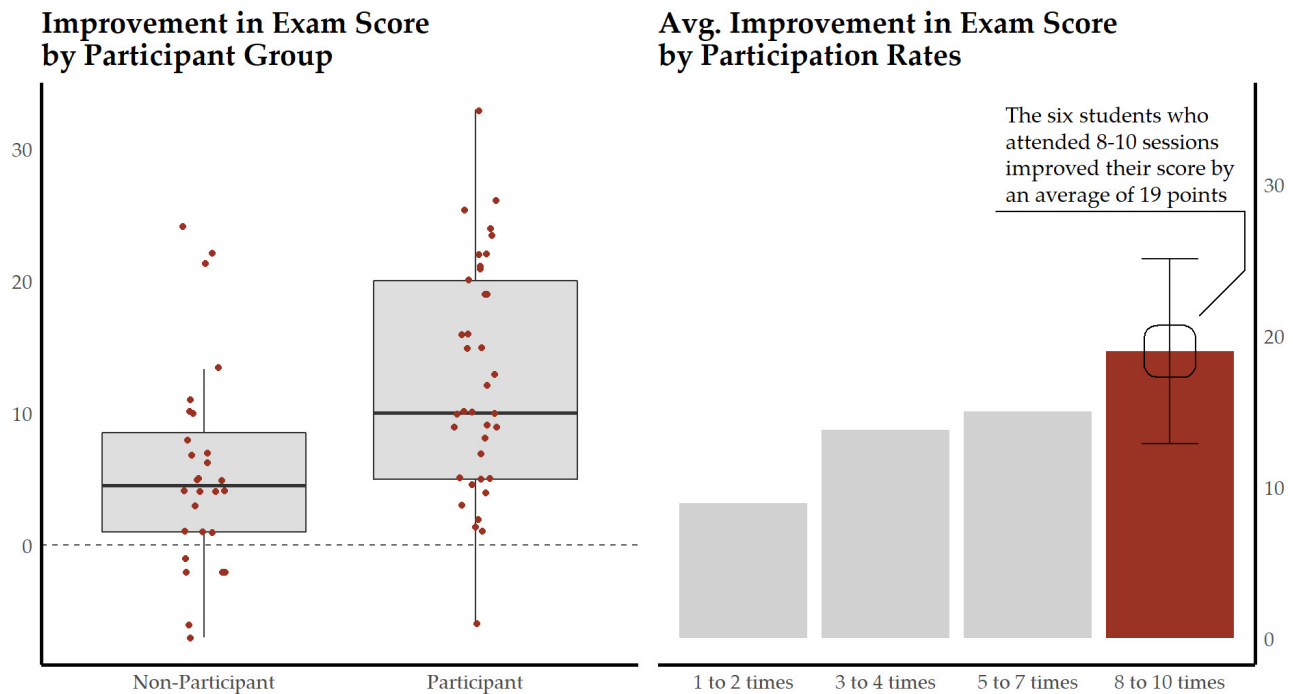
needing help (3.9 percent). The common qualitative responses from SI participants included, "More coordination between instructor and SI peer leads would help," "I need SI in my other classes," and "Make it work for commuters" (the latter student attended SI one to two times). Non-participant responses included, "This class is hard. Why is SI not part of the class?" and "I forgot about SI. Remind students more."

Discussion

SI offers a promising learning approach for Journalism & Mass Communication programs interested in improving student outcomes for high-risk courses that can frustrate students within a major and impede graduation rates. While the study presented here involved a relatively small number of participants, which makes generalization difficult, it offers guidance for other programs and institutions. The reduction in DFWs was commensurate with SI efforts elsewhere, mostly involving STEM courses (International Center for Supplemental Instruction, 2017). In general, students in the study presented here were open to trying SI, with more than half attending SI at least once, a percentage on par with other humanities social sciences classes (Wolfe, 1987) and typically higher than

Figure 3. SI Impact on Final Exam Score

"Improvement" is defined as final exam score minus entrance exam score. Two outliers (one participant and one non-participant) were removed from improved metrics. Their "improvement" was vast enough, about 50 points, to be considered anomalous and non-representative of the relationship between the entrance and exit exams.

Improvement in Exam Score by Participant Group

Avg. Improvement in Exam Score by Participation Rates

The six students who attended 8-10 sessions improved their score by an average of 19 points

STEM classes (Eroy-Reveles *et al.*, 2019). However, less than a third of students attended more than two sessions. But success was forthcoming for those who did: none failed, and, on average, their final exam score increased by 13 or more points, more than the equivalent of a full letter grade.

However, success was not distributed evenly among students, especially those who might have benefited most. In particular, first-generation students, Pell-eligible students, and males participated less in SI, and while more HU students joined SI, nearly 40 percent of those participating in the study did not. This is in contrast with previous studies based on large STEM courses, where HU students predominantly used SI (Smith *et al.*, 2017; Longfellow *et al.*, 2008; Eroy-Reveles *et al.*, 2019). This study does not address why more students did not participate in SI, though one possible explanation might be class size and approach. Students entering a lecture course with 200 or more students might expect to need SI in a way that those joining a more active-learning course capped at 20 students do not. Showing HU students the practical benefits of participation in SI for even small classes (i.e., lower DFW rates, higher grades) could be of value.

Another possible explanation for the participation gap comes from Conrad and Gasman (2015), who highlighted the importance of exposing at-risk students to SI early in their college experience. In reviewing national research, they found SI to be valuable for students during their initial college year, as it aided in establishing a network of peer-based learning and "spaces for talking" about attending college (Conrad & Gasman, 2015, p.145). It is possible that exposure to SI prior to a 300-level course could be key for students to recognize SI's value within a major. Increasingly, more institutions are including SI as part of the first-year general-education experience. This, in turn, could lay the groundwork for greater success in journalism and related courses and points to the need for a holistic approach from institutions for engaging at-risk students.

Based on survey responses, students struggled to find time to attend SI. Transfer, first-generation, Pell-eligible, and HU students, in particular, likely experienced long commutes and work as barriers to participation. Future research could explore ways (e.g., online sessions) to reduce the time commitment needed to benefit from SI. Additionally, scholars might consider the value of SI as an academic time-saver, in

Table 3. Student demographics & SI participation

a. First-generation college student

	Passed reporting	Failed reporting	Total	%
Non-participant				
College experience	15	4	19	56%
First generation	9	6	15	44%
Total	24	10	34	100%
Participant				
College experience	31	5	36	90%
First generation	3	1	4	10%
Total	34	6	40	100%

b. HU students

	Passed	Failed	Total	%
Non-participant				
Not under-represented	17	6	23	64%
HU (under-represented)	8	5	13	36%
Total	25	11	36	100%
Participant				
Not under-represented	18	5	23	57%
HU (under-represented)	16	1	17	42%
Total	34	6	40	100%

c. Pell-eligible students

	Passed	Failed	Total	%
Non-participant				
Not Eligible	14	5	19	53%
Pell Eligible	11	6	17	47%
Total	25	11	36	100%
Participant				
Not Eligible	22	3	25	62%
Pell Eligible	12	3	15	38%
Total	34	6	40	100%

Figure 4. Top Exit-Survey Responses

'SI sessions helped me...'
Change from Spring 2019 to Fall 2019
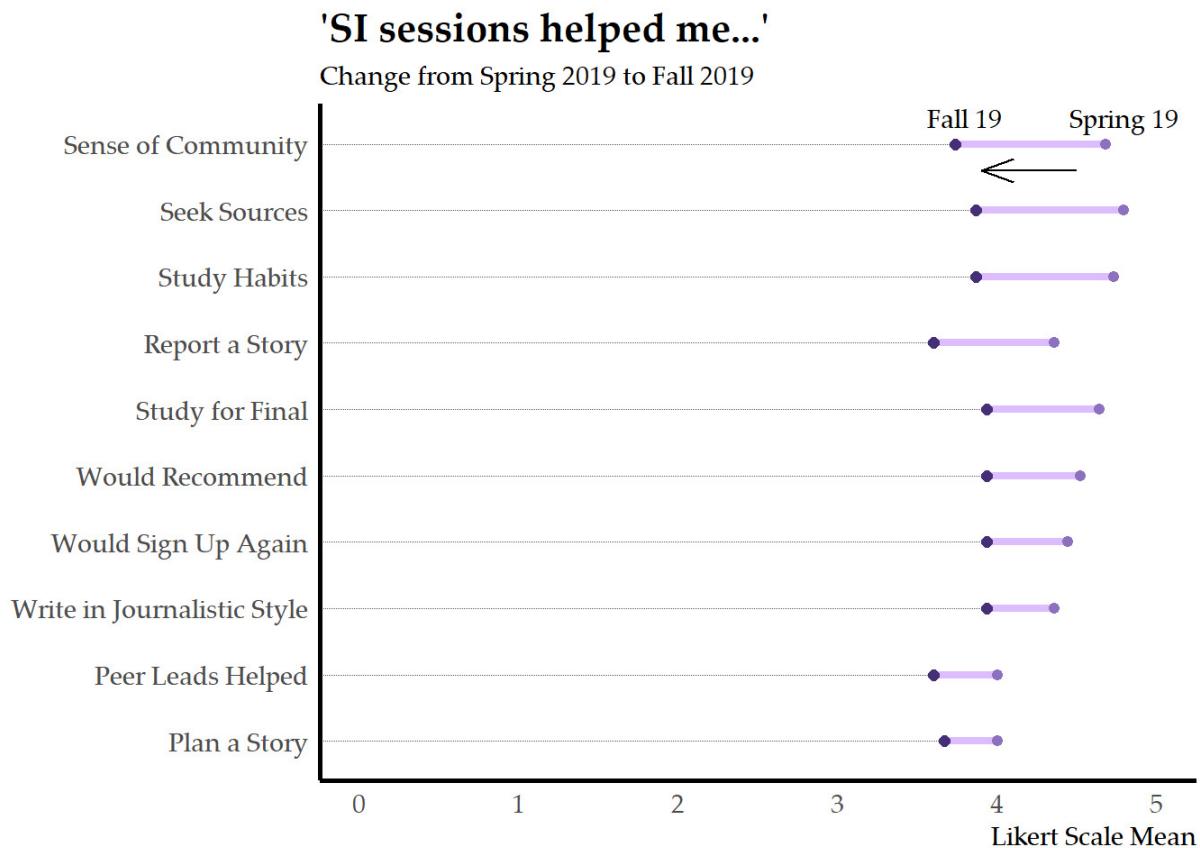
that it offers students a peer group for focused learning and a potentially faster path to graduation.

However, some researchers caution against the view that SI reflects anything more than student motivation (Dawson *et al.,* 2014). For instance, they point to self-selection as a form of motivation and as an indicator for course success (Dawson *et al.,* 2014). Certainly, this study highlighted the value of students attending SI, as the more sessions a student attended, the greater their course success. Yet, a tenet of SI is that it not be required, as that would undercut motivation. More research is needed regarding the accuracy of this view. Some programs and institutions already require SI attendance, though typically only if a student opts to register for a course section with SI (Eroy-Reveles *et al.,* 2019). Findings from this study suggest another option: a required threshold of attendance. This study found that no student who attended one to two sessions earned *lower than* a C, and as with previous research (Dawson *et al.,* 2014), students who attended at least four sessions experienced stronger academic outcomes. Future research should consider if there is an ideal exposure (i.e., number of sessions or hours) of SI for student success.

Educators laud the learning approaches employed in SI; however, researchers have yet to fully identify what specific methods and session sizes contribute most to student success. There is a lack of consistency in how and what SI leads teach. It is possible that simply the additional time spent in SI sessions, with the additional exposure to course material, is what leads to improved grades and DFW rates. Also, while SI is generally carried out in small sessions as a best practice (International Center, 2020, n.p.), the optimal session size is unknown and small programs, particularly accredited journalism programs, raise the question, can a session be too small?

The drop in student participation and satisfaction found in this study from Spring 2019 to Fall 2019 points to the potential value of skilled SI leads. More than three quarters of SI participants reported that their SI leads helped them succeed. However, the Spring 2019 leads were more experienced and may well have played a key role in encouraging both attendance and participation in peer-based learning strategies. The set-up for this implementation of SI relied heavily on the skills and enthusiasm of the SI leads. As SI was not required or incentivized (i.e.,

extra credit), students would be unlikely to attend without experiencing some benefit.

This study faced several limitations. Perhaps most notably, the author of this paper both oversaw the SI leads and taught one of the six reporting sections. Additionally, due to financial strains within the department, SI was not fully implemented. SI leads limited their meetings with reporting instructors and their attendance in reporting classes (i.e., their efforts to be model students); also, SI sessions did not start until the third week of classes. These measures were taken to guarantee that the allotted SI funds would last the full semester.

Conclusion

Supplemental instruction is a peer-based learning approach with the potential to improve academic outcomes for a broad mix of students. This study documents SI's impact in the realm of journalism, and offers programs a straightforward, relatively inexpensive model from which to build. While more research is needed regarding how best to include HU students in this type of additional instruction, the value of doing so is clear. SI offers students both tangible and intangible outcomes, from increased final grades to a greater sense of community among their peers and within their journalism program.

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