

The Learning Assistance Review



NATIONAL
COLLEGE LEARNING CENTER
ASSOCIATION

NCLCA

About *The Learning Assistance Review*

The Learning Assistance Review is an official publication of the National College Learning Center Association (NCLCA). NCLCA serves faculty, staff, and students in the field of learning assistance at two- and four-year colleges, vocational and technical schools, and universities. All material published by The Learning Assistance Review is copyrighted by NCLCA and can be used only upon expressed written permission.

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NCLCA's Definition of a Learning Center

The National College Learning Center Association defines a learning center at institutions of higher education as interactive academic spaces which exist to reinforce and extend student learning in physical and/or virtual environments. A variety of comprehensive support services and programs are offered in these environments to enhance student academic success, retention, and completion rates by applying best practices, student learning theory, and addressing student-learning needs from multiple pedagogical perspectives. Staffed by professionals, paraprofessionals, faculty, and/or trained student educators, learning centers are designed to reinforce the holistic academic growth of students by fostering critical thinking, metacognitive development, and academic and personal success.

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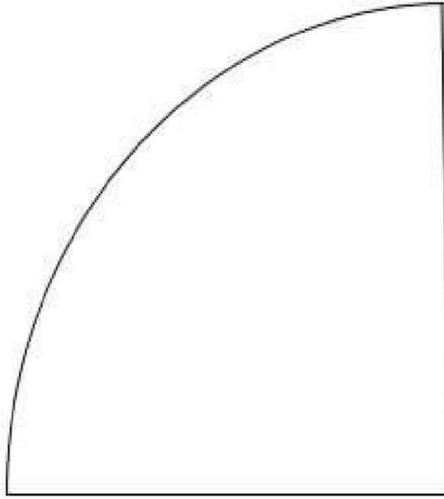
Contents

| | |
|---|----|
| Letter from the Editor | 7 |
| Michael Frizell | |
| Designing a Writing Tutor-Led Plagiarism Intervention Program | 11 |
| Bailey Bridgewater | |
| Ellie Pounds | |
| Alysa Morley | |
| Indiana State University | |
| Learning from Writing Center Assessment: Regular Use Can Mitigate Students' Challenges | 29 |
| Carol Trosset | |
| Kathy Evertz | |
| Renata Fitzpatrick | |
| Carleton College | |
| Book Review: Grit: The Power of Passion and Perseverance by Angela Duckworth | 53 |
| Johanna Dvorak | |
| Understanding and Addressing Student Procrastination in College | 57 |
| Ryan Korstange | |
| Maxwell Craig | |
| Matthew D. Duncan | |
| Middle Tennessee State University | |
| The Benefits of Utilizing Learning Management Systems in Peer Tutor Training | 73 |
| Kaitlyn Crouse-Machcinski | |
| West Chester University of Pennsylvania | |

| | |
|---|----|
| Embedded Tutoring to Enhance Dialogic Feedback and Improve Student Self- Regulation | 87 |
| Heidi Marshall Gabrielle Valentic Samara Rasmussen The Chicago School of Professional Psychology Online Campus | |
| Pertinent Publishing Parameters | 95 |
| NCLCA Membership Information | 99 |

Letter from the Editor

Here's an 89-degree angle.



Mildly infuriating, isn't it?

It's like an itch on the bottom of your foot that manifested only after you finished lacing up your boot. Or a bug who met an untimely end on your windshield moments after you washed it. The gas pump stopping at \$30.01. A politician making a promise. The blacks in your pants and shirt matching until you step outside. Human pop-up ads vying for your attention to sell you lotion in the mall when you just don't. Want. To. Talk.

Cross.

This is how I feel whenever I write. The work is never perfect. It's always missing... *something*. I second-guess every word, every turn of phrase, and every comma.

Did DaVinci not say that art is never finished, only abandoned?

Should I ever view my work as a 90-degree angle, I'll quit writing. It won't be worth the pursuit.

In fact, I'm considering calling my memoir *The 89-Degree Angle*. The 90-degree angle infers perfection. Greatness. Achievement. I always feel like I'm that close.

One correct word. One inch to the right. One breakthrough. One win.

One degree closer.

But like the writers in this volume, I'm determined to push through possible imposter syndrome or any niggling little kernels of doubt to tell the story of our center at Missouri State University. Sometimes, I relay it through data collected by mining records. Other times, our story is told through a student who found success after struggling through *that* class. You know the one. It's the class that made you work harder than you ever have before.

It's the one that made you realize you can't do it alone.

A graduate student once told me through gritted teeth and a quivering lip that the first draft of the statistical results chapter of her thesis was an 89-degree angle. She had no idea how to make it interesting or readable. After attempting and abandoning multiple drafts, she remembered a story I told during orientation. The chair of my first thesis listened with little sympathy as I extolled the horrors of the worst writer's block I'd ever experienced. I just couldn't get started. I sat at my manual typewriter (yeah, I'm that old) and just... stared.

"Get a piece of poster board and write, in big letters, 'I'm not writing the great American novel!' and hang it above your desk. That way, whenever you sigh and throw your head back, you'll be reminded to just get it written." He then dismissed me with a wave.

I did exactly that.

I finished the 110-page thesis in three weeks.

"It doesn't have to be perfect," I told her, paraphrasing my former thesis chair. "Just get it written."

So the graduate assistant followed my advice - and also purchased her own poster board. Several tortured drafts and close calls with whiplash later, she clicked SEND and waited.

Her advisor sent it back to her. His email read:

What is this? Rewrite the whole thing.

More tears led to a draft that her chair deemed, “Kinda readable.” I told her to take that as a win.

Look, even the best writers have editors who serve as a second set of eyes and can shepherd their work to the next level.

This is why I admire the work of Bailey Bridgewater, Ellie Pounds, Alyssa Morely, Ryan Korstange, Maxwell Craig, Matthew D. Duncan, Kaitlyn Crouse-Machcinski, Heidi Marshall, Gabrielle Valentic, Samara Rasmussen, Carol Trosset, Kathy Evertz, Renata Fitzpatrick, and Johanna Dvorak. They know how to spin a yarn that resonates with the reader.

Enjoy.

Michael Frizell
September 10, 2019

Designing a Writing Tutor-Led Plagiarism Intervention Program

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Ellie Pounds
Alysa Morley
Indiana State University

Abstract

This article examines how one public university helped address student plagiarism through a collaboration between the Math and Writing Center and the Office of Student Conduct and Integrity. Included is a thorough discussion of how the program was designed, the roles each office played, and how the two areas collaborated to assess success. Since the implementation of this program in 2015, writing tutors have worked for three hours each with over 400 students and plagiarism offenses have decreased to less than one percent for the 2017-18 academic year. Ideas for replicating this initiative are provided.

Introduction

We hear it in department meetings, at gatherings of teaching assistants, in faculty professional development events – I hear it every week while keeping my hours as a writing fellow in our Faculty Center for Teaching Excellence. It is stated with frustration, with anger, with exasperation, with a look of total surprise and, ultimately, with disappointment. “Our students plagiarize.” Faculty tend to see it as a problem unique to our campus or, sometimes, as a problem unique to their classrooms. There is often a sense of relief when others mention it – some new faculty think it only happens to them, and it must be their fault. Of course, student plagiarism is not a problem exclusive to Indiana State University (ISU), a 4-year public institution in Indiana.

At universities all across the world, students are plagiarizing

on a million different assignments in a million different ways. Some copy and paste from the internet; some buy papers wholesale from professional writers; some have friends write for them and others recycle papers they have used for other classes – no matter how it is done, plagiarism presents a real challenge to both faculty and administrators (Cronan, Mullins & Douglas, 2018; Harji, Ismail, Chetty & Letchumann, 2017; MacLennan, 2018; Singh & Remenyi, 2016; Sprajc et al., 2017). In addition, students are plagiarizing for myriad reasons, including lack of confidence, poor time management, lack of education about how to cite properly, and conflicting cultural ideas of what is fair to use in a paper (Adhikari, 2018; Chien, 2017; Selemani, Chawinga & Dube, 2018). Research shows that the problem of plagiarism is increasing at institutions around the world, leading faculty and administrators to search for answers regarding how to handle this problem (Ellery, 2008; Evering & Moorman, 2012; Singh & Remenyi; 2018). This increase is especially present in Business schools and is attributed by some scholars to the ease of access to other people's work the internet provides (Thomas, 2017). The most popular way for universities to deal with the heightened threat of plagiarism at the moment is through the use of plagiarism detection software like Turnitin. Numerous free and for-purchase versions of such software exist, and resources are constantly being allocated to conduct new studies on the best software-based methods for catching plagiarism (Park, Jung, Lee & Joe, 2018). For many of these software programs, students have to run their papers through the software system when turning it in. The software then identifies any overlap between the student paper and other papers found on the internet or submitted through the software before. This means that not only can a student not as easily copy and paste information found online, they also cannot submit the same paper for multiple classes, and students cannot share papers. The software program often gives a percentage that indicates how much of the paper's content was found elsewhere.

While the use of plagiarism detection software is shown to reduce instances of students copy and pasting or using wholesale articles from the internet, software programs do not teach students why plagiarism is wrong and how to avoid doing it accidentally

(Shang, 2018; Weber-Wulff, 2016). Students who do not understand why a paper is showing a high percentage of plagiarism may still need the guidance of a faculty member or tutor to help them understand the result and correct the problem.

In the fall of 2015, the problem of plagiarism directly affected the Math and Writing Center (MWC) when a writing tutor who had been working with students for a year was accused of plagiarism after boasting about cheating on social media. Ironically, this tutor was scheduled to give a plagiarism presentation for a faculty member who had approached the Math and Writing Center because she had caught several students plagiarizing. The coordinator and I (at the time the MWC's Director) had a choice – fire the tutor or use this unfortunate misstep to create something productive.

This paper offers an explanation of why the Plagiarism Intervention Program was created, including how the administrators of the writing center obtained buy-in from the Office of Student Conduct and Integrity, how the curriculum was designed, and the roles tutors played in both designing and implementing the program. Information is also provided on the challenges and successes with which the program has met. Finally, suggestions for implementing plagiarism intervention programs on other campuses will be given, as will ideas for how to further assess such programs using both qualitative and quantitative measures.

Program Inception

Until 2015, Indiana State left the handling of plagiarism cases to Student Conduct and Integrity, who generally punished it with a warning to go along with the failed assignment (and possibly class). At the second offense, the student was in danger of being removed from the university. These punitive measures have long been the standard. After all, our students are told time and time again that plagiarism is wrong and will not be tolerated. Yet it continues to happen. When it happened in the Math and Writing Center, the staff began to question the way this issue is handled. What's more, we began to wonder if we could do more to stop it. After all, as Stephanie Bell (2017) notes, learning centers are ideally positioned to help address the problem of student plagiarism. This is especially

the case for writing centers that are led by tutoring professionals or administrators. Though faculty members are often tasked with running writing centers and often make brilliant directors, a plagiarism intervention program like this one is likely to gain buy-in from faculty members across campus if the person overseeing the center is not themselves a faculty member. An administrator who is trained in issues of plagiarism and also student conduct is a neutral party who will never see a student come in for plagiarism, then turn up in their own class. For that reason, it is possible that an administrator running the lab could be perceived as less biased towards students turned in for plagiarism.

Not only can faculty members view the learning center as neutral ground, but students may also view this space in the same way. Learning centers are out-of-classroom support, which makes them less intimidating for students. Sometimes when a student is caught plagiarizing, he or she complains that the professor simply does not like them. Tension is created between the faculty member and student. Because the learning center or writing center is not directly involved in that relationship, the workers there are able to take an outside perspective on the situation.

In ISU's case, a writing tutor caught plagiarizing was the catalyst for change. The administrative staff had to decide whether it was ever acceptable for a student who had been caught committing academic dishonesty to continue helping other students with their writing and, if so, how this could be used as an educational moment. Instead of firing the plagiarizing tutor, the MWC coordinator and I had a conversation with the tutor to see if she might be willing to use her experience to help others in order to keep her job, given that she never plagiarized again. She agreed, and the Plagiarism Intervention Program was born.

Program Design

The initial idea brainstormed between me, the center coordinator, the faculty member for whom we were to present, and the tutor, was to create a series of three appointments for students who had plagiarized. Based on this general idea, the project was given to an MWC Writing Graduate Assistant, who was tasked with

fleshing out the details of the curriculum, creating any documents to be used in the sessions, and training the other writing tutors on how to perform a plagiarism intervention. It is important to note that all students working in the MWC have gone through FERPA training standard to university student workers, faculty, and staff, as well as more extensive in-center training on confidentiality and handling sensitive information. The MWC is CRLA certified and upholds that organization's standards of confidentiality.

The Plagiarism Intervention Program is based on the concept that preemptively teaching students proper writing skills, as well as how to use sources responsibly, will decrease the number of plagiarized papers turned in (Chankova, 2017). The program also supports the theory that understanding plagiarism should not be framed so much as a moral issue, but as a part of learning to write well (Lee, Anderson & Spronken-Smith, 2017). The fact that students are talking about plagiarism with a peer allows them to open up and have a more casual, honest conversation than they might with a professor or student conduct professional. Finally, the program addresses the need for campus-wide support for faculty dealing with plagiarism (Vehvilainen, Lofstrom & Nevgi, 2018). A campus with robust plagiarism support should offer training for faculty, software to help identify it (we use Turnitin), a student conduct office with a streamlined process for reporting, and a learning or writing center that can help talk to students about the issue so that the faculty member is not left alone in dealing with the problem. The ISU Math and Writing Center fulfills this last role on campus.

During the creation of the curriculum, the staff involved determined that each appointment would be with the same tutor so that they and the student could develop at least a basic level of trust over the course of the meetings. As the program changed over time, this was no longer possible, but meeting with the same tutor is still ideal. In the first meeting, the student presents the plagiarized paper to the tutor, and the two discuss what about the assignment constituted plagiarism. The student also completes a self-evaluation of his or her writing (Appendix A), which allows the tutor to better focus the sessions. The student and tutor discuss the self-evaluation and choose two to three areas on which their meetings

will focus. Throughout the session, the tutor may also refer to the PI Reformatting document (Appendix B) which offers suggestions for topics to cover in the sessions. Together, the pair decides on two to three issues from the Reformatting document that deserves their focus. Since it is not possible to cover all the issues listed in just three sessions, this prioritization requires careful thinking about which skills will benefit the student the most in his or her future academic career.

Aside from determining how the student feels about their writing, the tutor must also determine whether the plagiarism was accidental or intentional, as this sets the course of the rest of the session. If the offense was accidental, for example, a student had incorrectly cited information, the tutor covers the rules for how to cite properly. If the student intentionally cheated, the conversation instead turns to the ethics of plagiarism and its implication in the academic community, as well as for the student.

During the second appointment, the student and tutor work on the particular issues that led to the plagiarism. For students who copied or bought work because they were not confident in their own skills, the sessions aim to build up their confidence. For those with citation problems, the sessions involve learning how to consult resources that help students cite in whatever format their professor requires. During the third session, the tutor and student begin correcting and re-writing the plagiarized paper. The faculty member decides whether or not they want to offer the student any credit for this revision. At the end of each session, the tutor writes comprehensive notes in the center's online system, which allows the tutor to remember what they were working on during the intervention, as there may be several days between appointments. The notes also allow anyone reading (the coordinator or other tutors) to see the focus of the meeting. In cases where the student does not always get to see the same tutor, session notes allow communication regarding what has already been covered and what still needs to be covered in sessions.

Collaborating with Faculty

In the first year, this arrangement depended on individual faculty

members across campus referring their plagiarizing students to the MWC, though after a year, the Office of Student Conduct began automatic referrals. About a dozen professors from various departments began using the service regularly, calling to check up or requiring proof of attendance for their students who went through the program. As word of the new service spread through word of mouth, some faculty members who admitted to not having confidence in identifying plagiarism asked if they could refer students they merely suspected of plagiarizing, to which we agreed after researching whether this violated any of our university handbooks (which it does not).

As research shows, it is vital for faculty to be able to talk with colleagues like writing center directors about student plagiarism, and as the writing center staff is all trained in confidentiality and FERPA, as well as writing issues, they provide safe outlets for these conversations (Vehvilainen, Lofstrom & Nevgi, 2017). Scholars who study plagiarism have found that faculty worldwide are often reluctant to turn in plagiarism because they do not feel comfortable identifying it, or they worry that the process of reporting it will be overly taxing. Others fear that the repercussions for the student will be entirely out of their control (Adele, 2017; Stowe, 2017; Vehvilainen, Lofstrom & Nevgi, 2017). Writing center tutors at Indiana State University became adept at leading conversations that would quickly reveal whether the student cheated – this is usually done primarily through asking the student a series of detailed questions about their paper and their writing process. Some try to cover up the offense, while others are eager to admit to a peer that the work is not really their own. A tutor is much less threatening than a professor, as they have no control over the student's grade.

Some professors choose to contact the MWC directly before going through Student Conduct and Integrity, not wishing to formally turn the student in but recognizing that he or she needs assistance in order to not cheat again. This is often the case with faculty who teach first-year courses. Those teaching capstone classes are more likely to turn the case in to Student Conduct, then follow up directly with the MWC, though the reason for this is unknown.

Collaboration with Student Conduct

After 45 to 50 students had completed the program – more than anticipated – the coordinator and I decided to have a conversation with Student Conduct and Integrity’s director. We talked with him about what we were doing and found the idea well received. The Student Conduct and Integrity Office opted to mandate the intervention for all students accused of plagiarism starting the following fall. Importantly, they also decided to place a hold on the account of any student who had been caught plagiarizing, but who had not yet gone through the program. This would clearly signal to the student that the university takes academic integrity offenses very seriously, as they cannot register for classes with a hold on their account. Within that next year, the number of students going through the program more than tripled to roughly 150. As a result, the team of graduate assistants was tasked with formalizing the intervention curriculum and training all of the center’s twenty-two writing tutors to hold plagiarism sessions. Student Conduct agreed to help us assess the program by providing us with recidivism rates for all students who went through the program.

During the three years in which the program has been in place, recidivism rates have steadily dropped (see Table 1). The number of students who finish the Plagiarism Intervention Program and repeat the offense is now less than 1%. This initial look at the data on student recidivism indicates that the program may have a positive impact on students. The staff of the MWC is optimistic that the content of the intervention itself is responsible for keeping students from plagiarizing, as students who did not understand how not to plagiarize learn how to avoid it, and those who intentionally plagiarized understand by the end why it is wrong and what could happen if it continues. This outcome can be examined in future years through the surveying of students who have completed the program. It is also, of course, possible that other factors are at play: students do not like having to spend three hours going through the program, and they may assume if they do it again, they will have to spend more time. They may also feel embarrassed by having to talk to another student about their offense. Either way, results are promising enough to continue the program with increased qualitative and quantitative assessment efforts.

Table 1

Recidivism Rates Since Plagiarism Intervention Program Inception

| <u>Year</u> | <u># of Plagiarism Cases</u> | <u>Repeat Offenses</u> | <u>Recidivism Rate</u> |
|-------------|------------------------------|------------------------|------------------------|
| 2015-16 | 92 | 6 | 6.52% |
| 2016-17 | 111 | 4 | 3.60% |
| 2017-18 | 101 | 1 | 0.9% |

Impact on the MWC

The Plagiarism Intervention Program has impacted the Math and Writing Center and those who work there. For one, the center has had to allocate a significant amount of student wages to the program, given that over 300 hours per year are dedicated to designing the curriculum, training new tutors to deliver the program, meeting with the students, and following up with faculty and Student Conduct. For this reason, the coordinator of the center approached Student Conduct to ask if they might be able to sponsor a graduate assistant or a dedicated tutor to work primarily with this program. While this request was met with a positive response from the Student Conduct and Integrity director, a Vice President had to be petitioned for the funding. Unfortunately, the university's current budget crisis has prevented funding being offered so far; the MWC director will continue to follow up yearly with the Director of the Office of Student Conduct and Integrity.

The presence of the PIP program has been an excellent marketing tool for the center. Faculty who were not aware of the center now learn about it when they turn a student in for plagiarism. Some faculty who did not refer students to the service before now do so because they have worked with a writing tutor to discuss the student's issue, and they have a better understanding of how the center works and increased trust in the work done there.

Increased marketing has also occurred because students who visit the center for plagiarism intervention become aware of the other support and services offered there. If they are already visiting

to talk about their writing, they are more likely to come back to get help on another paper or in their math class. Overall, the increased visibility of the MWC has been positive, as has the furthered respect given the center, as it is seen as fulfilling a more academic role than most support centers because it now handles such a challenging issue. Thus far, students have not attached a negative stigma to the center, possibly because students who have not been turned in for plagiarism generally do not know that the center conducts the plagiarism intervention service.

Challenges

Implementing the PIP program came with several surmountable challenges. Firstly, tutors had to be carefully trained on how to deal with plagiarism issues, especially when the student was hesitant to admit that he or she plagiarized. Tutors are not and should not be in the business of establishing plagiarism cases- the tutor's challenge is to get the student to open up about the issue and understand that the tutor is not there to punish them, but to help them address the problem. Though some tutors were initially uncomfortable in their first session of plagiarism intervention, they are all now adept at helping those students and gaining their trust.

On a more practical level, the MWC faced challenges in scheduling these appointments. Students are often turned in for plagiarism at the end of the semester, which is already the center's busiest time. While the center usually runs on a drop-in, first-come, first-served basis, the plagiarism intervention programs were initially scheduled so that the faculty member was aware of when the student would visit, and so that the student was more likely to show up. However, when the center received a rush of 50 plagiarism intervention appointments, with three sessions each, tutors felt like they were prioritizing those students over those who come in to get help with their papers. Many plagiarism intervention students also failed to show up for their appointments, which meant the tutor wasted 15 to 20 minutes waiting for them when they could have been helping another student.

To avoid inefficiency, and to make sure certain students were not prioritized over others, the MWC shifted to drop-in

for all appointments, including interventions. Though students sometimes do not like having to wait a few minutes for a tutor to become available, this model has overall worked extremely well. Students usually bring a book or homework and just study until a tutor is free. This change has also led to students sometimes working with different tutors for each of the three sessions. In this case, the session notes and open communication between the tutors are invaluable, as they can quickly get up to speed on where the student is in the process of learning about plagiarism and correcting their work. After the sessions have ended, the graduate assistant in charge of the program contacts the professor and Student Conduct and Integrity to update them on their work with the student. At that time, the professor may choose to accept the re-written paper, and Student Conduct and Integrity indicates on the student's file that he or she completed the program.

Assessing the Program

While some initial assessment of the program has been conducted, including Student Conduct and the Writing Center analyzing recidivism rates as noted above, more work could be done in this area. There are a variety of both quantitative and qualitative strategies for approaching the question of whether this program is successful. So far, the Indiana State University Math & Writing Center has used surveys and usage data to track the program's impact. The center's coordinator wrote a survey that she distributed to the email addresses of all 101 students who completed plagiarism intervention in 2017-18. Fifteen students responded. In the survey, students were asked about their confidence in avoiding plagiarism going forward, whether they felt the program was helpful, and how the program could be improved. Results were positive, with most students stating that they found the program helpful.

Students were asked when surveyed to rate how confident they felt in their ability to avoid plagiarizing going forward. Of the 15 respondents, 14 stated "Definitely yes" to the statement "I am confident in my ability to avoid plagiarizing in the future." One student stated "Somewhat." No students stated that they were "not really", "absolutely not" confident, or "unsure." When asked whether

the sessions were helpful, five students responded that they were “extremely” helpful, while six said they were “moderately” so and two stated that they felt “neutral” about the sessions’ helpfulness. Students were then asked to respond to the statement “What I learned from the sessions has changed my behavior or writing process in some way.” Seven students responded that they strongly agree with the statement, five moderately agreed, one was neutral, and two disagreed. These responses, though they represent a small n, indicate that students generally have a positive reaction to the plagiarism intervention program. This is somewhat surprising, as the authors had anticipated that students may feel resentment for having to take the time to attend, or they may feel as if they were being unfairly punished. This is especially true given that nine of the respondents claimed that they “accidentally plagiarized”, with only five stating they “knowingly plagiarized” and one stating that they “did not plagiarize.”

MWC usage trends among students who used the plagiarism intervention program are also positive. In the same survey, students were asked whether they had used the Math & Writing Center before visiting for plagiarism intervention. Most had not, but two students who indicated they had never used it before going on to visit the center multiple times for help with assignments after completing the plagiarism intervention. 7 additional respondents who had never used the center before indicated that, after completing the program, they would use the center for help with future assignments. Students seem to not hold any ill will towards the center after being forced to go through the program, and most had encouraging things to say when asked to write in how the program could be improved. Comments included “it was amazing,” “it’s perfect as is,” the suggestion that tutors could “help you to understand how to plan out an essay”, “online scheduling,” and “I honestly don’t know.” When asked for any additional feedback, one student said the program was “excellent”, while another stated “the tutors cut right to the chase and focused on my needs. Overall, it was a great learning experience.” Overall, the authors were surprised at the positive responses collected and hope to expand the survey, as well as the number of respondents, in the future.

In addition to student-perception, a larger-scale study on usage post plagiarism intervention would be beneficial. It would be easy to pull the names of all students who have gone through the program since its inception and search the tutoring database to see how many of those students continued to use the service after their intervention. Conversely, it would be telling if students who had previously used the center discontinued use after the intervention program. With faculty involvement, it would also be possible to study the quality of student writing after the plagiarism intervention program. While the recidivism rate indicates that students are generally not plagiarizing after they get caught the first time, it would be good to know whether the overall quality of their writing improves after the 3-session plagiarism program.

Replicating the Program

The results of Indiana State University's plagiarism intervention program show that the program is worth replicating at other universities that have a writing center or lab. In addition to being a great bridge between student support and student conduct, the program seems to be beneficial for the students who participate. Because fewer students are repeating the offense, fewer students are being dismissed for academic integrity reasons, which means the school is better poised to retain them.

The first step in replicating this program is for the writing center director to approach the director of student conduct (or similar unit on campus) with full knowledge of plagiarism trends on campus. Ideally, the directors would contribute graduate assistants from both their areas, who would create a curriculum unique to their students and needs together. This would ensure that student conduct is well invested in the project and more likely to offer monetary and personnel support. Though the writing center would most likely be delivering the intervention (perhaps with the help of some student conduct workers), both units should play an active role in advertising the service to faculty. This can be done during new faculty orientation. Both units would also be involved in assessing the program. The writing center is well poised to supply data from tutor comment forms, as well as usage information. Student Conduct

can provide recidivism rates. Ideally, Student Conduct would be willing to do what is done here at ISU – place a hold on the accounts of students who have not taken the necessary steps towards resolving their plagiarism issue.

In general, we have found that outside of the hours spent actually working with the students, managing this program is not particularly time-consuming. The initial creation of a curriculum may take several weeks of work for a graduate assistant, but once this is created, the program tends to run smoothly and efficiently. Collecting data is not particularly strenuous, and reporting on the program's success has been easy. Because plagiarism is an issue that is already on the minds of so many chairs, deans, and administrators, this is a program that looks great in the portfolio of both the writing center and student conduct. Most importantly, this is a program that allows students the chance to learn from their mistakes, correct them, and continue on to have a successful career in college.

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Appendix A

Self-Evaluation of Writing Skills

Directions: Read the summary for each category below, and then rank each

catc

| 1 | 2 | 3 | 4 |
|------------------------------------|--------------------------|-------------------|------------------------|
| Brand new or confusing information | Recognizable information | Known information | Well known information |

_____ Structure/Organization

The structure and organization of an essay provides a skeleton for the content. This includes having clear sections (introduction, body, conclusion) and transitioning from one section to another.

_____ Evaluating Sources

Evaluating sources examines whether sources are credible, contain bias, and have confirmed, relevant content. This also includes assessing the platform or medium (print, online, etc.) of the source.

_____ Citing

Whenever information from an outside source (anything you did not create) is used, it must be cited in the paper using MLA, APA or another citation style. Each style has its own unique format for in-text and final references.

_____ Including source material/content

Using source information to support ideas adds credibility to an argument. Outside information can be added through summary, paraphrase, or quotation, and knowing when to use which form helps with the flow of an essay.

_____ Prewriting/Planning

Setting aside time to write and developing short-term goals for writing can help make writing easier. Creating webs or outlines to review the organization of an essay also helps improve the flow and comprehensibility of written work.

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Based on the answers above and discussion of the topics, the following 2-3 categories have been chosen for review during the PI sessions:

Appendix B

Plagiarism Intervention Session Categories

Writing Structure & Organization

- Introduction
- Thesis Statement
- Body Paragraphs
- Topic Sentences
- Conclusion
- Transitions & Flow

Evaluating Sources

- Credibility of Source(s)
- Evaluating content of source
- Platform/Medium of source
- Review for bias & exaggeration

Citing

- When to cite
- In-text citations
- References/works cited
- Formatting

Including source material/content

- Paraphrasing
- Summarizing
- Quoting
- o When to use each
- Combining info from sources
- Transitioning to source content

Prewriting/Planning

- Outlining
- Webbing/brainstorming
- Time management

Learning from Writing Center Assessment: Regular Use Can Mitigate Students' Challenges

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Abstract

To demonstrate effectiveness, writing centers collect quantitative and/or qualitative information about and from the students who use their services. A broader understanding of effectiveness requires us to consider both direct measures of writing quality and why some students do not use the writing center. This mixed-methods research followed one entry cohort for two years and found that regular use of our Writing Center was correlated with higher grades in writing-rich courses, regardless of student background. Findings regarding one-time visitors indicate that adopting more flexible pedagogies is key in encouraging them to return.

Keywords: writing centers, assessment, administrators, learning centers, tutor training, learning assistance, consultant preparation

Introduction

Like most writing centers, Carleton College's collects a host of data from our visitors before or at the start of every conference: class year, major (if they have one), the kind of writing project they're working on, the class for which they're writing, the writer's hoped-for focus of the session, the date when the final draft is due, etc. We also ask writers to complete a short post-conference questionnaire that poses two questions: "What did you learn today?" and "Would you return to work with the same consultant (and why or why not)?" Writers deposit their forms in a locked box, our office assistant records the comments on an Excel spreadsheet, and we return the feedback, without the writer's name, to the consultant.

In responding to these open-ended survey questions, students tell us about the wide variety of writerly lessons learned, from how to bring their own voice to an essay in which they primarily "share knowledge," to "how to fix wordiness," to "how to write a clear thesis statement," and "how to do a literary analysis (text → ideas, not the other way around)." Students almost uniformly praise their writing consultants with comments like these: "She was responsive to my questions and had good ones of her own. Her responses seemed considered and [she] tried to think about the content and context of my essay"; "She was a good listener and patient. Asked good probing questions"; "He was really helpful and welcoming. And, I think if I'd come with more to work with, he could've helped me significantly with the editing process." In fact, out of 1,306 recorded post-conference evaluations students completed during the 2017-18 academic year, only 11 students answered "No" and 10 replied "Maybe" when asked if they would return to work with the same consultant.

When the three of us—an associate director of Institutional Research and Assessment, the Writing Center director, and the assistant Writing Center director—began working together in fall 2015, we agreed that replicating these user satisfaction surveys was unlikely to produce much new information. Instead, we decided to focus on determining if Writing Center use led to success in meeting Carleton's writing requirements, and on learning how the Writing Center could reach more students.

Purpose

As the project unfolded, the data that we uncovered prompted us to refine these research questions:

- Who uses the center and who does not?
- Do those who use the center write better than those who do not?
- Does using the center enable all students to achieve comparable writing skill levels?
- Why are non-users staying away from our center?
- Which students visit our Writing Center only once, and why do they not return?

We hypothesized that students who took more writing-rich courses and made more frequent use of the Writing Center would demonstrate more effective writing skills by the end of the sophomore year than those who did not.

Literature Review

The Challenge of Demonstrating Effectiveness

In his foundational essay, “The Idea of a Writing Center,” Stephen North (1984) set out to describe what writing centers do:

In a writing center the object is to make sure that writers, and not necessarily their texts, are what get changed by instruction. In axiom form it goes like this: Our job is to produce better writers, not better writing. (p. 438)

Writing center scholars have not been in complete agreement about what should take place in writing center spaces to achieve North’s vision, which has made it difficult to conduct and share assessment practices. Furthermore, as Boquet and Lerner (2008) pointed out, “Research into the effects of writing centers on students’ writing is rare for many methodological and practical reasons, given the wide variety of variables that contribute to students’ texts” (p. 184). Put simply, writing centers have struggled to convince their stakeholders, and sometimes even themselves, that what they do with writers is effective. Believing or knowing that

senior administrators, as budget decision-makers, demand evidence of effectiveness, writing center professionals feel they must assess something—e.g., student satisfaction, students’ self-reported learning outcomes, writers’ confidence levels—that points toward success (Lape, 2012).

Against a backdrop of literature on attitude and writing performance, Davis (1988) noted that “students with lower apprehension have been shown to write more fluently” (p. 3). Davis’ (1988) study showed that students who used the writing center had significantly better attitudes towards writing compared to those who did not. Carino and Enders (2001) investigated attitudes as well. Specifically, they explored one assumption of writing center lore, “the idea that the more times students visit the writing center, the more they like it” (p. 85). Examining survey data about students’ satisfaction with their tutor, their confidence with writing, their perception of improvement, and whether or not the writer would recommend the writing center to other students, the researchers found some correlations between satisfaction and perceptions of improvement, confidence, and likelihood of recommending the center to others (Carino & Enders, 2001).

Thonus (2002) turned to interactional sociolinguistics in an attempt to research effectiveness. She triangulated “conversation-analytic and ethnographic techniques” (p. 110) with interviews, observing that “symmetry of tutor and tutee perceptions correlates with judgment of the tutorial as ‘successful’” (Thonus, 2002, p. 124). Again, the study was mainly focused on attitudes or perceptions, but this is not the only kind of assessment attempted by writing center researchers. In “Counting Beans and Making Beans Count,” Lerner (1997) bluntly asked, “Are we helping to improve student writing?” In an attempt to answer that question, he “wanted to know if students in first-semester composition who came to the writing center during this past fall semester had higher grades than students who did not visit: the outcome—first-semester composition grades; the intervention—the writing center” (p. 2). He found that “students with the weakest starting skills (according to their SAT verbal scores) came to the writing center most often and benefited the most” (Lerner, 1997, p. 3).

Researchers have continued attempting to assess the effectiveness of writing centers by looking at the grades their users achieve on writing tasks. Spurred by the proliferation of writing centers outside the U.S. at institutions where English is the language of instruction, Tiruchittampalam, Ross, Whitehouse, and Nicholson (2018) compared essay-writing scores of L1 Arabic students who did and did not use the writing center at United Arab Emirates University. The researchers found that “students in the experimental group who attended eight writing center consultations made significantly higher gains in their overall writing scores” (p. 10), perhaps most notably in writing skills related to higher-order concerns.

Yet, writing center scholars have recognized that this type of assessment does not necessarily establish the role of writing centers in student success. Lerner (2003), for example, returned to the issue in his essay, “Searching for the ‘Proof’ of Our Effectiveness.” He questioned the value of considering SAT scores and students’ grades in their first-year composition courses to gauge writing center effectiveness. Henson and Stephenson (2009) conducted a study in which half the students in a composition class used the writing center and the other half did not. The former showed statistically significant improvement; however, as the authors acknowledge, students chose which group they wanted to join, suggesting that motivation could have been a factor in their improvement and that those who used the writing center did so at varying rates.

Schendel (2012) advised writing center directors to refocus their assessment efforts:

By explicitly describing your values, devising outcomes and goals from them, and communicating your results in persuasive ways to your audience, you’ve done the most important work associated with assessment: you have based your assessment on foundational principles within the field of writing center scholarship and you have framed the discourse about assessment of writing centers with the values of your center and the field. Rather than shaping your writing center’s work around the discourse

of assessment on your campus, you've made your assessment goals and outcomes a statement of what your center values, believes, and does. (pp. 115-116)

Jones (2001) took up the challenge of reviewing the literature on assessing whether and how writers may be changed by using a writing center, concluding that an exhaustive search of the literature revealed that only a handful of researchers had attempted to evaluate the performance of writing centers in enhancing student writing skills through the use of empirical study designs. Moreover, assessment efforts have been complicated by the variety of writing centers and the populations they serve, the frequency of a writer's visits, and other factors. Jones (2001) pointed out that indirect evidence, such as that produced by satisfaction surveys, cannot be read as indications of writing improvement. Thompson (2006) encouraged centers to continue using satisfaction surveys but also to develop ways to measure student learning. Gofine's (2012) review of the literature on writing center assessment noted administrators' reliance on surveys and usage data, which have limited validity. She recommended that centers "work together to create strong, standardized assessments with high reliability and validity" (p. 47).

Composition scholars and writing program administrators have also faced the challenge of documenting effectiveness. White's (1994) observation in "Issues and Problems in Writing Assessment" remains true: "The diverse and often conflicting stakeholders not only come from different perspectives on assessment but also have developed different definitions of the purposes of writing" (p. 12). Those who teach writing may prioritize "individual student growth" (p. 12), while senior administrators may demand accountability in the form of quantitative data. Furthermore, while students' literacy practices presumably develop and mature during their time in college, writing center administrators have acknowledged various explanations for that change: a particular writing-rich course, a professor who provided detailed feedback and met with the writer on numerous occasions, writing-savvy roommates, visits to the writing center—or some or all of the above. However, typical writing center assessment strategies rarely link these factors to the quality student writing.

Writing Center Non-Users

Salem's (2016) examination of writing center non-users at Temple University has sparked intense interest among writing center consultants and administrators. The International Writing Centers Association October 2018 meeting in Atlanta included no fewer than 10 presentations that reacted in some way to Salem's findings and conclusions. In her essay, she offered an incisive observation of the broader writing center community and, indeed, our own Writing Center:

It is a peculiar feature of writing center research that there has been no meaningful investigation of the decision not to come to the writing center. Nevertheless, our professional discourse reflects a lot of anxiety about non-visits. Specifically, we worry that non-visits happen when students have gotten the idea that the writing center is "remedial." If they think that going to the writing center is stigmatized, then they will choose not to visit, even if they genuinely want help with their writing. Therefore, most writing centers work hard to control how the writing center is represented to students. (p. 151)

Salem focused on Temple University's 2009 entering class of 4,204 students. For the next four years, she looked at who used the center and who did not. At the end of the study, she documented that 22% of the 2009 cohort had visited the writing center at least once. A particularly intriguing data point came from a survey that students took before arriving at Temple University. One question asked students how likely they were to seek out tutoring services while enrolled. Salem found a high correlation between students' answers and their actual use of the writing center. As she notes, "It shows that students' decisions about seeking tutoring were in place before they come to the university. This means that their decisions cannot simply have been the result of what we say to them about the writing center" (p. 155). In fact, she maintains, "The choice to use the writing center is raced, classed, gendered and shaped by linguistic

hierarchies” (Salem, 2016, p. 161).

Space constraints preclude a comprehensive review of the literature on writing center assessment. What we want to emphasize, though, is that writing center administrators seem to have moved away from a defensive, sometimes resentful stance toward “proving their worth” and toward an embrace of what assessment can tell them about the work they do with and for writers and their institutions (Schendel & Macaulay, 2012).

Methods

The Study Cohort

This study tracked Carleton’s fall 2015 entry cohort of 491 first-time first-year students for two years. Carleton is a small, highly selective¹ liberal arts college in Minnesota.

Data Analysis

Following the standard assessment model of inputs, experiences, and outcomes (Astin, 1993), we assembled the following data on this cohort of students.

Input data. Inputs are the backgrounds and characteristics that students bring with them to college, and which might reasonably be thought to influence the course of their education.

- Standardized test scores (SAT Critical Reading and Writing, or ACT English) were available for every student. Most Carleton students have high test scores from a national perspective, but their academic experiences are also affected by how they compare to their classmates. Therefore, instead of using the raw scores, we created a variable placing students into quintiles within their entry cohort.
- Students for whom English was a second language were identified by Carleton’s admissions office.
- Students from a low-income family and/or who were the first generation in their family to attend college were also identified as

¹ The middle 50% of SAT scores for this cohort ranged between 660-750 for Critical Reading, 660-770 for Math, and 650-750 for Writing. Twenty-six percent of the entering class were U.S. students of color, and 12% were international students. Fifty-four percent of the cohort received need-based financial aid.

such by the admissions office.

- Students' perceptions of their own writing ability and preparation were measured using their responses to two questions on the CIRP Freshman Survey, which provides data "on incoming college students' background characteristics, high school experiences, attitudes, behaviors, and expectations for college" (HERI, 2019). These questions were "Rate your writing ability as compared with the average person your age. We want the most accurate estimate of how you see yourself." and "Do you feel you will need any special tutoring or remedial work in writing?" Of the students in our cohort, 379 students had completed the survey.

Each of these data points was used as a separate variable in the regression analyses presented below (which consider colinearity when calculating their separate effects). In addition, we calculated a "challenge" score for each student. With no way of knowing the relative effects of the different challenges prior to the analysis, we simply counted how many each student faced, assigning one point for each of the following characteristics:

- The student's SAT or ACT score was in the bottom two quintiles of the entering cohort.
- The student did not speak English as their first language.
- The student was a first-generation and/or low-income student.
- The student reported on the CIRP that they had been an average or below-average writer in high school.
- The student reported on the CIRP that they expected to need help with writing.

The cumulative scores helped us understand the cohort as a group. Twenty-four percent of these students had a challenge score of 0; that is, they entered college facing none of these circumstances. Thirty-seven percent had one challenge point, 20% had two points, 12% had three points, 6% had four points, and 1% had five points. This score was used in our analyses in addition to the separate variables, as a way of flagging students who arrived facing multiple challenges. Our goal was to test the idea that students facing one or

more of them might, without additional effort and support, have a harder time achieving college-level writing skills.

Experiences. Two experiences were investigated: enrollment in writing-rich courses and use of our Writing Center. Many courses at Carleton involve writing, but some are deemed “writing-rich” due to a special focus on developing this skill through the number of writing assignments (typically, three or more), opportunities for feedback, and opportunities for revision. All first-term students at Carleton enroll in a writing-rich “Argument & Inquiry” (A&I) seminar. One additional writing-rich course is required for graduation, and many are offered across the curriculum. Enrollment records revealed how many writing-rich courses each student took during their first two years (through spring term 2017). More than 60% had taken two to four of these courses, while 1% had taken ten. By the time they graduate, the average student has completed six writing-rich courses. Carleton’s academic year consists of three ten-week terms.

Since our Writing Center’s online appointment scheduler and post-conference reports track all visits, we could measure how often each student had visited the Writing Center during each term. This resulted in three measures of use:

- whether the student had ever visited the Writing Center
- a student’s total number of Writing Center visits
- the number of different terms in which the student visited the Writing Center

Fifty-three percent of the cohort never visited the Writing Center. Thirteen percent visited only once, 20% came between two and seven times, and the remaining 14% visited eight to more than 30 times in their first two years. When we look at how these visits were distributed, we find that regardless of the number of total visits, 20% of students visited the Writing Center during only one out of six terms. Eleven percent visited during two different terms and 8% during three terms, with only 8% of students having visited the center during four or more of their first six terms.

As Table 1 shows, between one third and two thirds of each

demographic subgroup² in the entry cohort used the Writing Center during their first two years. Though more students visited as first-year students than as sophomores, some did visit for the first time in their second year.

Table 1

Use of Writing Center by Demographic Groups in Cohort

| Demographic Groups | % of these who used the Writing Center in 2015-16 | % of these who used the Writing Center in 2016-17 | % who used the Writing Center ever |
|------------------------|---|---|------------------------------------|
| All students | 42% | 22% | 47% |
| Females | 49% | 27% | 57% |
| Males | 31% | 17% | 36% |
| White U.S. students | 38% | 18% | 42% |
| U.S. students of color | 42% | 20% | 49% |
| International students | 66% | 53% | 69% |

Table 2 looks at Writing Center use for students facing each type of challenge identified. The highest usage rates (81%) were found among students who had said on the Freshman Survey that they thought they would need help with writing. English Speakers of Other Languages (ESOL), students with SAT scores below Carleton's average, and students who entered college thinking they were average or weak writers compared to their high school peers were all more likely to visit the Writing Center than their counterparts of whom these things were not true. Low-income and/or first-generation students were slightly less likely to visit than their peers with higher incomes and college-educated parents, but this was the smallest difference we observed. At Carleton in general, then, simply using the Writing Center is not an indication of prior academic or socioeconomic privilege.

² Demographic information was obtained by Institutional Research from the college database and matched with Writing Center records. The category "U.S. students of color" includes all U.S. citizens or permanent residents who identified themselves as having any race or ethnicity other than "white," or who identified as mixed race.

Table 2

Challenges and Writing Center Use

| Initial challenge | % of these students who used the Writing Center | % of students <i>not</i> facing this challenge who used the Writing Center |
|--|---|--|
| Low-income and/or first generation | 43% | 47% |
| ESOL | 69% | 41% |
| SAT Verbal scores below the Carleton average | 56% | 44% |
| Self-rated own high school writing as average or below on CIRP | 54% | 48% |
| Expected on CIRP to need help with writing | 81% | 46% |

On the one hand, it was disappointing to learn that more students did not make use of the Writing Center. On the other hand, these patterns provided us with a natural experiment that allowed us to test the effect of the Writing Center for those students (of all descriptions) who did use its services by comparing them to similar students who did not.

Outcome data. Two outcome measures were available that reflected the quality of the students' writing during their first two years at Carleton: their average grade in writing-rich courses, and their score on the required sophomore writing portfolio. While course grades probably combine measures of writing quality with other variables, such as participation and improvement, it is presumably true that students who receive high grades in writing-rich courses are deemed by their professors to write well.

We used portfolio scores because they are a direct assessment by faculty members of student writing. All Carleton students are required to submit a writing portfolio at the end of the sophomore year, including three to five papers written for different academic departments and demonstrating five types of academic writing. Each portfolio is read and scored by one to three Carleton faculty members who are not already familiar with the student's work. Passing the

portfolio is considered to mean that a student is ready to do upper-level writing in their major field.

What predicts writing-rich course GPA? Looking just at the input variables, we found that students with relatively lower Verbal SAT scores had received lower average grades in writing-rich courses. The same was true of students with higher challenge scores at entry (Table 3).

Table 3
GPA in Writing-Rich Courses for Different SAT Quintiles and Challenge Scores

| SAT verbal score by quintile | Average writing-rich GPA | Challenge score | Average writing-rich GPA |
|------------------------------|--------------------------|-----------------|--------------------------|
| 770-800 | 3.62 | 0 | 3.62 |
| 740-765 | 3.49 | 1 | 3.48 |
| 700-735 | 3.42 | 2 | 3.44 |
| 650-695 | 3.44 | 3-5 | 3.28 |
| 450-645 | 3.29 | | |

To examine the effects of college writing experiences, linear regression³ was used to see how the various inputs and experiences worked together. Table 4 shows that only two variables had a statistically significant effect⁴ on grades in writing-rich courses: the number of terms a student used the Writing Center, and their Verbal SAT score quintile.⁵ The strongest predictor of performance

3 This statistical procedure identifies the independent effect of each variable on the outcome (in this case, GPA in writing-rich courses). Standardized beta shows the relative strength of each variable. Significance reflects the likelihood of a pattern occurring by chance; values smaller than 0.05 are considered “significant” or meaningful.

4 The regression equation using inputs and experiences to predict this outcome was significant at $p < .000$, meaning that there is a genuine relationship between the significant predictors and the outcome variable.

5 There is a large literature analyzing and critiquing the use of SAT scores as predictors of academic success. Our analysis did not use actual scores; instead, we used a measure of how students’ scores compared to the rest of their Carleton cohort. The low-income first-generation students in this cohort did have, on average, lower SAT scores than other students; however, simply low-income and/

in writing-rich courses was the number of different terms that the student used the Writing Center during their first two years at Carleton. Note that just having visited the center did not have an effect, nor did the total number of visits in the two years. Taking more writing-rich courses also had no effect on writing-rich GPA. (Perhaps this is not surprising since students do a lot of writing in many courses that do not carry the writing-rich designation.) Though Verbal SAT score (relative to other Carleton students) remained an independent predictor, students who faced the other challenges when they entered college all performed equally once their use of the Writing Center was taken into account.

Table 4

Linear Regression Analysis of the Effect of Inputs and Experiences on GPA in Writing-Rich Courses

| Inputs and Experiences | Standardized Beta | Significance |
|---------------------------------------|-------------------|--------------|
| # terms used the Writing Center | 0.239 | 0.013 |
| SAT verbal score quintile | 0.187 | 0.023 |
| Expected to need help with writing | not significant | 0.120 |
| # challenges faced at entry | not significant | 0.145 |
| Low-income and/or first-generation | not significant | 0.148 |
| Used the Writing Center at least once | not significant | 0.219 |
| # total visits to the Writing Center | not significant | 0.229 |
| # writing-rich courses taken | not significant | 0.413 |
| English is not their first language | not significant | 0.596 |
| Self-rated writing ability (CIRP) | not significant | 0.657 |

Our Writing Center, then, can be said to be effective in helping students perform better in writing-rich courses, but students must use it consistently over multiple terms. A single visit does not have an

or first-generation status itself was not a predictor of writing outcomes. We are not attempting to generalize our findings regarding SAT scores.

inoculation effect, nor does visiting many times in a single term. It appears, though, that using the Writing Center consistently over time can mitigate the potential negative effects of a variety of challenges that some students bring when they enter Carleton.

The Sophomore Portfolio. Portfolios written by the fall 2015 entry cohort were evaluated in June 2017, and 91% received either a “Pass” or an “Exemplary” score. The remaining 9% received a “Needs Work” score. Among these students, those facing one or more of the challenges we examined had the same pass rate (90%) as did the entire cohort. Table 5 shows that for four of these challenges, students who used the Writing Center passed at a higher rate than those who did not. Students with Verbal SAT scores below the Carleton average were the only group for which Writing Center use and passing the portfolio were unrelated. Students facing three or more challenges (regardless of which ones) who had never used the Writing Center had the lowest pass rate (65%).

Table 5

Pass Rates on Sophomore Writing Portfolio by Challenge and Writing Center Use

| | | |
|--|------------|------------|
| Low-income and/or first generation | 90% passed | 76% passed |
| ESOL | 84% passed | 79% passed |
| SAT Verbal scores below the Carleton average | 83% passed | 82% passed |
| Self-rated own high school writing as average or below on CIRP | 88% passed | 80% passed |
| Expected on CIRP to need help with writing | 91% passed | 80% passed |
| Students with three to five challenges | 88% passed | 65% passed |

Another linear regression, using the same variables in the table above plus writing-rich GPA, showed that GPA in writing-rich courses was the strongest predictor of a student’s score on the portfolio (standardized beta = 0.241, $p=.000$). The two other

predictors were SAT verbal quintile ($SB=0.178$, $p=.034$) and the number of writing-rich courses a student took ($SB=.096$, $p=.066$). Remember, however, that the writing-rich GPA itself is primarily predicted by how consistently a student used the Writing Center.

Interviews: Why students do or do not visit the Writing Center. The results of our analysis show that students who use the Writing Center repeatedly tend to become successful Carleton writers. Given this observation, we wanted to know why half of the students never visit. To explore this question, we worked with the research methods class in Carleton's Sociology/Anthropology Department. During winter term 2016, each student in this class interviewed a member of the cohort we were studying, that is, students in their second term. Interview questions focused on how interviewees worked on challenging writing assignments, whether they sought help either from the Writing Center or someone else, and why or why not. Unknown to the student interviewers, some interviewees had visited the Writing Center and others had not, but all had received a grade of B+/B/B- in their required first-term Argument & Inquiry seminar. Trosset's analysis of the interview transcripts revealed six themes that help to explain student behavior.

The Writing Center's perceived scope and usefulness.

Whether or not they had ever used the Writing Center, some students thought that staff helped with grammar and clarity, but not with content, structure, or organization. Some who had been to the Writing Center once may have believed they knew exactly what would happen at their next visit - "You read it aloud to see if it makes sense" - and decided they could do this on their own. Others were frustrated by the consultants' not being more explicit and asking questions like, "What do you think the problem is?" One interviewee said, "If I knew what the problem was, I wouldn't be there." If these students had received more specific guidance, they would have been more likely to return another time.

One international student reported that seeing a writing consultant had been helpful because they met with the same consultant every time. Some interviewees who had course-specific writing assistants (WAs)—i.e., undergraduate Writing Center consultants embedded in writing-rich courses—said they found their

WA helpful for drafting ideas or discussing what they were trying to say. However, they sometimes viewed WAs as a separate resource, so that working with a WA may not have led a student to feel comfortable with the Writing Center. Other students said they went to the Writing Center to brainstorm and construct arguments.

Perceptions of faculty as a source of assistance. Some students reported that they went to the Writing Center for help with grammar or structure, but they asked the professor for help with the topic. If the assignment prompt was unclear, students were more likely to ask the professor than the Writing Center because they wanted feedback from the person who would grade the paper. Students worried about what professors wanted. Even if they continued to find the assignment instructions confusing after meeting with the professor, they still viewed the professor as the best source of helpful information.

The formality of students' relationships with professors made the students feel they needed to have well-thought-out ideas before seeking help. They would not ask their professor to read a draft. Students were likely to be frustrated if they had gone over a paper with the professor and then received a grade lower than A-.

Belief that subject knowledge is necessary to give useful writing advice. Some students saw peers who lacked subject-area knowledge as unable to provide beneficial advice. Even if students thought another pair of eyes could be helpful, they believed that a particular individual needed specific content knowledge to provide useful writing advice. Some students said they would meet with a Writing Center consultant whose major gave them credibility in the subject matter of the paper. Others reached out to advanced students majoring in the field for which the student was writing.

Time management. Procrastination caused some students to avoid the Writing Center because they believed that, without having done some writing in advance, their visit would not be productive. Some students thought they needed to have written a draft before seeking assistance. If they wrote the first draft fewer than about three days before it was due, they believed there would not be time to ask for help. Some students incorrectly thought the Writing Center did not accept drop-in visits (it does when consultants

on duty do not have prior appointments). Appointments were seen as inflexible and hard to fit into students' schedules.

Students who procrastinated said there was not enough time to visit the Writing Center before the paper was due, or that they did most of their writing at night when the Writing Center was closed (the Writing Center is typically open until 11:00 p.m. or midnight from Sunday through Thursday). Some students claimed to work better under the pressure of last-minute work. Some procrastinators received good grades, so they did not have an incentive to plan ahead. Other students, however, said Writing Center appointments were helpful as scaffolding. Scheduling an appointment encouraged them to start working sooner to produce some writing beforehand.

Perceived stigma. There was an interesting difference of opinion about what it meant to be a “good student.” Some interviewees thought that good students were more likely to be organized and make Writing Center appointments in advance, while others believed that going to the Writing Center, despite our concerted efforts to normalize help-seeking behavior, was “not what you do here [at Carleton].” These students worried about seeming unintelligent or being stigmatized if they sought feedback even from an embedded writing assistant. The feeling of stigmatization decreased when a professor encouraged all of their students to use the Writing Center.

Out of fear of being judged, some students avoided the Writing Center when struggling with something that seemed so basic as to go unexplained in the prompt, such as “Construct an argument about x.” Even if the students understood all the readings about x, they may not have known how to construct an argument. Even high school AP classes may not have prepared students for the kinds of writing they were being asked to do at Carleton.

Though all the students interviewed had received Bs in their A&I seminar, some said they were still unsure of their writing ability, while others thought they were very good writers. If a student knew they had a certain type of writing challenge (e.g., incorrect grammar), they may not have visited the Writing Center because they did not want to be reminded of the problem. Students said they would not ask for help from someone if they felt uncomfortable “messaging up”

in front of that person.

Perceptions of writing as an individual vs. a social act.

Some students said that, unlike math, writing is personal; therefore, there is no such thing as a right way or a right answer. This attitude seemed based on the conviction that writing is expressive and subjective, and that others' views of one's writing are irrelevant. It sees writing as not dependent on eliciting a response from one's audience. Others found criticism threatening because they strongly identified with the views they expressed in a paper.

Since only 20 first-year students were interviewed, we cannot infer anything about the frequency of these views in the student population as a whole. However, each of these themes was expressed by more than one first-year student, and all were familiar to the juniors and seniors who conducted the interviews.

Responding to the Findings

We were encouraged by the strong relationship between consistent Writing Center use and positive outcomes. Despite the likelihood that some degree of the variation in both student behavior and outcomes could be explained by characteristics that we were not in a position to measure (such as motivation, or time devoted to writing assignments), we were convinced that the findings were meaningful and that both the Writing Center staff and others at the college should act on them.

Faculty and Administrators

The directors of Writing Across the Curriculum, TRIO,⁶ the Learning and Teaching Center, and Advising were alerted to the findings about the effects of consistent use of the Writing Center over several terms. They were encouraged to recommend the use of the Writing Center to their students and stress the importance of repeated visits.

Writing Consultant Preparation and Ongoing Professional Development

New consultants return to campus a week before the start of fall term classes for an intensive, four-day workshop that prepares

⁶ Federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds (<https://www2.ed.gov/about/offices/list/opec/trio/index.html>)

them to work with fellow undergraduate writers. In response to our research findings, we revised our consultant education program. Previous workshops emphasized the importance of non-directive tutoring because writing center pedagogy has traditionally positioned writers as owners of their work and, we hoped, helped them develop metacognitive habits. This research project demonstrated, however, that some students perceived non-directive tutoring as simply unhelpful. Rather than leave the Writing Center with a new sense of direction, some writers left scratching their heads and vowing never to return.

Salem (2016) has argued that insisting on a non-directive approach privileges some students and disempowers others, and that social justice is at stake:

...[non-directive tutoring] is a pedagogy that is most appropriate for students who have solid academic preparation—who already have a pretty good idea of what kind of text they are expected to produce—and who already feel a sense of self-efficacy and ownership over their texts. In other words, it is best suited to students with privilege and high academic standing. When students do not understand the expectations—when they “don’t know what they don’t know” about writing—then non-directive tutoring doesn’t transform them into privileged students, it simply frustrates them. (p. 163)

Our goal in revising the workshop was to encourage new consultants to view non-directive and directive approaches not as poles on a good-bad binary but rather as options they could use depending on the situation. Particularly useful was the “spectrum of coaching skills” (Newby, 2018), which we adapted to prompt consultants to think about the spectrum of directiveness in their own conversations with writers. In essence, this visual representation shows novice consultants that responses ranging from listening and reflecting to making suggestions, offering guidance, and instructing exist on a continuum of legitimate choices. The key is deploying

these strategies intentionally. As Newby (2018) cautions, “Coaches need to be aware of when they’re in directive or non-directive mode, as well as which skills they tend to use by default without due consideration” (para. 9).

We also discussed Downey’s spectrum of directiveness (cited in Newby, 2018)—adapted to reflect writing center conversational moves—in a professional development workshop for all consultants, no matter how experienced. There we asked them to reflect on and respond to two questions: (1) why are you likely to use some moves more than others? and (2) what specific factors affect how directive or non-directive you might be in any given consultation? Through reflection and discussion, we empowered our student staff to be directive when they deemed it appropriate, especially when working with students who are new to college-level writing.

Conclusion

These findings suggest that tracking the percentage of students who have visited a writing center may not be a good metric for determining or arguing effectiveness. This is because among cohort students who used the center, the largest group of users (27%) visited only once during their first two years, and we now know that a single visit makes no lasting contribution to writing skills, though it may, of course, help with an individual assignment. Two metrics that would indicate whether or not students were benefiting from Writing Center support could be tracked fairly easily:

- What percentage of students visit the center during at least three of their first six terms?
- Do students feel that their first visit to the Writing Center was helpful? (This is an important metric because students who feel this way are more likely to return.)

Our early findings show that our Writing Center is effective at improving student performance. Consistent use of the Writing Center mitigates the potential negative effect of the challenges many students face when they arrive at Carleton. However, everyone has work to do. Students need to visit consistently over time and be

realistic about what they can accomplish during a single visit. Staff and faculty need to encourage students to visit, and our pedagogy must be flexible and intentional in responding to students' needs so that writers, especially those facing multiple challenges, will return.

This project also demonstrates that, while a project like ours takes us into the (scary) unknown, it can also lead to revitalization and greater inclusiveness.

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Book Review

Grit: The Power of Passion and Perseverance by Angela Duckworth

Reviewed by Johanna Dvorak

Duckworth, A. (2016). *Grit: The power of passion and perseverance*, New York, NY: Scribner.

Educators spend a great effort on student retention, yet we are still faced with student failure and college dropouts. We may have now found a key to students' academic achievement and college success from Angela Duckworth. Duckworth has pursued a question long sought by psychologists, "What makes some people succeed and others fail?" We commonly believe that the "smartest" and "most talented" are admitted and will succeed in college. College Learning Center professionals and developmental educators now have scientific evidence to support what they have long observed in our field of helping students learn and achieve. Persistence and passion, ie. grit, matters more than a student's talent.

Duckworth builds on the findings of Carol Dweck, author of *Mindset: The New Psychology of Success* (2006). Dweck distinguished between a growth mindset and a fixed mindset. She defined a growth mindset as a belief that our most basic abilities can be developed through dedication and hard work. Brains and talent can be developed and are not determined from birth as viewed by those with a fixed mindset. Dweck contends that we can learn to develop a growth mindset, even if we first think of our talents as innate.

GRIT summarizes Duckworth's research on the psychology of success, expanding on Dweck's premise and other research in this field. It traces her journey of discovery to the development of the Grit Scale, which can accurately determine a Grit score, thus predicting one's potential to "stick it out" when faced with a challenge. Her scale is applicable to college students, but also in other arenas.

The book is divided into three parts: 1) a definition of grit and its' relevance, 2) how to develop grit, and 3) external factors to growing grit. Duckworth's premise is this: "What we accomplish may

more depend on our passion and perseverance than on innate talent.” By adding her own personal experiences to her research, Duckworth tells us a compelling story. She uses examples from her research to debunk the theory that a person’s talent primarily determines their potential for success.

In Chapter 1 her study of incoming cadets at the US Military Academy at West Point in 2004 was a breakthrough finding. Only 1200 new cadets are chosen each year from 14,000 applicants. These applicants are thoroughly screened and given a “Whole Candidate Score” based on rigorous academic and physical factors. Yet, one-fifth would drop out before graduating, most after their first summer boot camp, called “the Beast,” prior to their first year. Other West Point psychologists, such as Mike Matthews, had begun to study why this occurred and worked with Duckworth to discover the answer. She developed and administered her Grit questionnaire to the cohort of incoming cadets, which is included in this book. Her Grit scale convincingly predicted who would succeed and who would drop out.

Duckworth duplicated her Grit scale findings when testing other venues where people faced challenges. These included people selling vacation home ownership as well as leaders in the fields of business, art, athletics, journalism, academics, medicine and law. The scale could ferret out who would be the most successful.

Duckworth developed a formula for the psychology of achievement which incorporates grit: $\text{talent} \times \text{effort} = \text{skill}$; $\text{skill} \times \text{effort} = \text{achievement}$ (p. 42). Talent is defined as how quickly your skills improve when you make an effort. Effort is how much you put into it. It counts twice because 1) effort builds skill and 2) effort can make skill productive with the outcome achievement (p. 42). She applies this formula to different situations concluding that an individual can develop their capacity for grit.

She also uses qualitative research by interviewing men and women who epitomize the qualities of passion and perseverance. She identifies four assets they possess: interest, practice, purpose, and hope. They displayed curiosity, daily discipline to improve, a belief that their work is important beyond themselves, and a will to go on despite setbacks (p. 91).

Part II of the book elaborates on each of these assets and

examples of how one can grow grit in each aspect. By weaving stories of several individuals, who range from Amazon founder Jeff Bezos to football Hall of Famer Steve Young, she strengthens her theory of how people have developed grit from within. Duckworth also shares interesting stories and others' research findings which illuminate her work.

Part III discusses external factors in growing grit. This section gives advice to parents. She highly recommends having children participate in extracurricular activities with adult guidance for at least a year. She describes a "virtuous cycle of struggle" where a person persists, succeeds, and gains the confidence to try something harder (p. 234). Studies have shown a strong correlation between extracurricular activity participation and success in later life.

Duckworth contends we can also create a culture of grit, exemplified by her interviews with Pete Carroll, coach of the Seattle Seahawks. This chapter recommends developing a well-defined philosophy and clear guidelines and boundaries to keep us on track.

This book is an asset to any learning center professional who wants to motivate their students. Tutors can be trained to develop their grit, to be role models, and encourage their students to study smarter. It could be used in advising settings to guide students in finding a major which best matches their interests. The Grit Scale could be administered and discussed in academic coaching sessions. It could be used in a math classroom. The message counters a student's belief that "I'm not good at math." Grit trumps talent, and since grit can be developed, our students can succeed at math and in college.

Duckworth reminds us that grit is not the only important of a person's character- what about honesty, integrity, and trustworthiness? Yet this book, convincingly based on theory and research, is very useful for higher education professionals. It provides practical advice to advance our most challenged students and unlock a key to all of our college undergraduates' academic success. Finally, it motivates each of us to develop our own passion and perseverance to help students reach their goals.

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Understanding and Addressing Student Procrastination in College

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Abstract

Procrastination is common in the collegiate sphere. However, procrastination is often stigmatized as causing college students to be unsuccessful. Most students have been told not to procrastinate, but they continue to do so, implying that student procrastination will not stop. Yet, significant discontinuities exist between emerging procrastination related research – specifically the distinction between active and passive procrastination, the concept of temporal discounting, and the methods of project management, each of which conflict with the standard advice given to students. This article synthesizes research in the aforementioned areas in order to create a more nuanced view of student procrastination and to establish better mechanisms to encourage student productivity.

Keywords: Student success, procrastination, temporal discounting, project management.

Procrastination is serious and is perceived by students, faculty, and academic support professionals alike as an immediate threat to a student's academic success. The severity is highlighted in numerous first-year experience textbooks. Ellis (2018) encourages students to “stop procrastination NOW” (p. 93). Procrastination is described as “one of the biggest threats to student success” (Baldwin, Tietje, & Stoltz 2016, p. 68), “a major threat to your ability to succeed in college” (Staley & Staley, 2015, p. 99), a “serious problem for college students” (Gardner & Barefoot, 2017, p. 56), and as the “enemy of

effective time management” (Cuseo, Thompson, Campagna, & Fecas, 2007, p. 102). These dire warnings are given because, as Harrington (2016) notes, “procrastination can increase your stress level and ultimately has the potential to reduce your academic performance” (p. 99). Despite these warnings, procrastination remains prevalent on college campuses (Steel, 2007; Steel & Klingsieck, 2016).

Clearly, students need to do their work well and on time if they want to learn, pass classes, and matriculate towards graduation. However, it is equally clear that the curricular and programmatic warnings students hear against procrastination do not result in reduced procrastination. This article surveys recent research on student procrastination, behavioral economics, and project management to provide a nuanced picture of student procrastination in college. This research is then marshaled to create a framework for student intervention that can take place within the context of a learning center that will help students move towards effective workflow and lasting learning.

Procrastination Research

Procrastination is the well-known preference to delay or avoid a task or decision (Kim & Seo 2015; Rabin, Fogel, & Nutter-Upham 2011; Schouwenburg 2004; Sirin, 2011). It is generally assumed that habitual procrastination produces increased stress and anxiety, which lead to lower academic performance, including lower grades, academic probation or suspension, and the loss of scholarships (Patzek, Sattler, van Veen, Grunschel, & Fries, 2015; Tice & Baumeister, 1997). Procrastination that causes decreased academic performance is worth avoiding, but not all procrastination produces adverse effects.

Recent research differentiates between active and passive procrastination (Choi & Moran, 2009), suggesting that not all procrastination leads to negative academic consequences. Active procrastination, also known as active delay (Chu & Choi, 2005; Corkin, Yu, & Lindt, 2011), refers to the “behavior of students who prefer to work under pressure, choose to postpone assigned work, complete requirements by deadlines, and attain satisfactory grades” (Hensley, 2016, p. 465). Whereas, students who passively

procrastinate are “paralyzed by indecision regarding action” and fail to complete their work (Chu & Choi, 2005, p. 260). The difference between these two modes of procrastination is wide and particularly apparent when considering the results of the delayed action. Active procrastination is a functional delay which students deploy strategically in order to complete their work, rather than an undesirable delay which produces unsatisfactory results. Specifically, active procrastinators postpone assigned work, pushing it into a time when they are more likely to complete it effectively. In the end, active procrastinators possess “desirable attitudinal and behavioral characteristics” (Chu & Choi, 2005, p. 249) and experience positive outcomes at a similar rate to non-procrastinators. Passive procrastination, by contrast, is typified by avoidance of work, which is to say that students push assigned tasks off to a time when they cannot be completed or completed well (Chu & Choi, 2005; Corkin, Yu, & Lindt, 2011). Not surprisingly, passive procrastination results in negative academic results (e.g., decreased academic performance, anxiety).

Other research makes it clear that procrastination and inefficient workflow are endemic on college campuses. Current estimates of the prevalence of procrastination, both passive and active, in college vary widely, suggesting that between 70% and 95% of students procrastinate (O’Brien, 2002; Steel, 2007; Steel & Ferrari, 2013; Steel & Klingsieck, 2016). Further, around 50% of students procrastinate habitually (Onwuegbuzie, 2000; Steel, 2007). These frequency statistics indicate that procrastination remains endemic, even despite the repeated warnings inherent to college success curricula.

The upshot – not all procrastination is detrimental. Instead, strategically delaying tasks results in comparable academic success to non-procrastination. The implication is that students should be encouraged to develop a comprehensive and strategic plan for completing their work, rather than being told to not procrastinate as a blanket statement. The act of delaying work itself is not enough to predict negative results. A far more significant problem is the total amount of time that students put into academic work. It is generally much less than faculty members expect, with more than

75% of first-year students reporting studying less than 10 hours per week, while only 5% report studying more than 20 hours a week (Eagan, Stolzenberg, Zimmerman, Aragon, Sayson, & Rios-Aguilar, 2016). Also, the most effective learning strategies, effortful retrieval, and distributed practice are the least used by students (Blaisman, Dunlosky, & Rawson, 2017). Taken as a whole then, research into procrastination and student studying indicate that students should be encouraged to use a strategic approach to scheduling and completing academic tasks.

Temporal Discounting

Why do so many students constantly and consistently delay academic work? Part of the answer comes from the concept of temporal discounting used in behavioral economics. Temporal discounting describes the “prefer[ence of] immediate rewards to those available after a delay” (Story, Vlaev, Seymour, Darzi, & Dolan, 2014, p. 1). That is to say, those rewards that are closer in time are more attractive than distant rewards. The result then is that “future outcomes are discounted (or undervalued) relative to immediate outcomes. Put differently, an identical (positive) outcome will become increasingly attractive the closer it is located in time to the time of decision-making” (Soman et al., 2005, p. 348). The degree to which a distant reward is discounted is captured by calculating both a discount rate and a discount factor (Soman et al., 2005). The discount rate measures the perceived devaluation of the future reward, where the discount factor identifies the reduction in the value of something that will happen in the future.

Temporal discounting research reveals a “pervasive devaluation of the future” (Ainslie & Haslam, 1992, p. 59), a devaluation which includes both future costs and future benefits. An easy illustration is the perceived value of ten dollars today versus that of eleven dollars next month. The passing of time outweighs the increase of the initial monetary value, and the distance of the reward makes the delay of the reward unappealing. Similar devaluation occurs with future monetary cost, to the extent that people often choose to purchase less expensive appliances with higher long-term operating costs (Frederiks, Stenner, & Hobman, 2015). It should be noted that there

is a difference between the perceived cost and benefit of delayed monetary value and time-based rewards, though there is a more pronounced present-bias with time-based rewards than the monetary value (Zaubman & Lynch, 2005). Calculating the devaluation is complicated, and goes beyond the scope of the present research, but suffice it to say that the calculation considers several variables (see Ainslie & Haslam, 1992; Zaubman & Lynch, 2005).

One surprising finding is the effect that the framing of the delay term has on the extent to which the future reward is devalued. Interestingly, framing the period of delay in terms of days remaining to reward results in greater discounting than does framing in units of weeks, months, and years (DeHart & Odum, 2015). Unit size, it seems, is instrumental in the perception of value. So too, framing around a specific date also results in less discounting (Read, Frederick, Orsel, & Rahman, 2005).

When applied to student workflow, temporal discounting helps nuance our understanding of the preference to delay work. In part, students value their free time today differently than that in the future, which they devalue. Delaying academic tasks makes sense in the framework of temporal discounting. So, a student who decides to watch a show on Netflix rather than finish an assignment worth 20% of their final grade discounts the value of the delayed reward received by completing the assignment in relation to the immediate rewards received by watching Netflix, and their decision for how to spend their time reflects their valuation of their time now and in the future. Within this framework, the student's choice to watch Netflix is caused by discounting the value of future rewards (e.g. a good grade on the assignment). So too, students often misestimate both their abilities and the time it takes to complete academic tasks, the result is that students often set themselves up to work in insurmountable timelines, and do not submit high-quality academic work.

Project Management

The final insight into procrastination comes from project management, which is a useful framework for completing large-scale, complicated tasks (e.g., completing a college degree). College students balance numerous tasks, including readings, assignments, and tests

for each of their classes, but in addition, many students add work (full- or part-time), co-curricular involvement, and have family and social responsibilities. These varied responsibilities compete for the college student's time and attention. Therefore, procrastination advice that treats a student's academic workload in isolation from both their other classes and the other aspects of their life is naïve at best. Viewing a student's workload holistically is imperative.

In its most basic structure, project management provides a framework for controlling and managing the achievement of a project (Munns & Bjeirmi, 1996). Many project management systems exist, but they each operate around a rough structure including project initiation, project planning, project execution, project monitoring and control, and project closure (Kerzner, 2017). Project management analysis delivers activity durations, the estimated completion time, and identifies the critical path, those activities that if delayed will delay the entire project (Shtub, 1988). Activities not on the critical path are those that could be delayed to some extent without delaying the entire project. It also allows a framework for accurate project planning and a methodology for revising such plans.

A common difficulty in project management is the prevalence of project delays, which are caused by “unforeseen disruptions, underestimation of activity duration times, [and] overestimation of resource amount availability” (Gerk & Qassim, 2008). Three methods can accelerate delayed projects: crashing, overlapping, or substitution. Task crashing is the application of additional resources to tasks to increase the speed of their completion. Task overlapping is the completion of multiple projects or multiple aspects of the same project at the same time. Task substitution is the replacement of one task for another, typically the replacement of a resource-intensive task for one that is suitable for the project but involves lower resource expenditure. Applying these concepts into the academic sphere will clarify the concepts. In this regard, one example of students' crashing tasks would be pulling all-nighters, overlapping tasks by working on homework during other classes and substituting tasks by replacing robust research using scholarly sources with quick google searches.

Also, project management recognizes that all projects are

affected by similar constraints: time, costs, and scope (i.e., amount of work to be done). Two crucial concepts relate to these constraints: resource slack refers to the surplus of an available resource necessary for the completion of the task. Significantly, Zaubman and Lynch (2005) demonstrated a pervasive misperception of slack gain, that is the perception that one will have more resource slack in the future. The critical resource that pertains to procrastination is time. The extent to which critical activities can be delayed is an expression of resource slack, and the pervasive delay of tasks in college relates to a misperception of slack gain, which implies that students often discount tasks that have little to no immediacy for tasks that do without considering the long-term implications for the successful completion of their larger project (i.e., graduation).

Applying project management systems to academic workflow results in two critical observations. First, accurate assessment of project costs and available resources is essential for efficient and effective project completion. Also, academic tasks cannot be considered in isolation from the rest of the student's life. The fact is that academic tasks have considerable cost, and students benefit from understanding both the resources they have available (i.e., time, energy, cognitive load, etc.) and the requirements of each of the projects that they are assigned. Second, project management provides an orderly system for helping students lay out a strategy for successful task completion. Given that the discipline looks towards the completion of complicated projects, it is most appropriate to apply these strategies to a larger project like passing all the classes in a semester rather than an isolated assignment.

Implications for Practice

When taken together, the research summarized above provides a more nuanced picture of student workload and productivity and points to the fact that student task management and completion are highly individualized. Further, delaying work is not always bad, and starting work immediately is not always preferable, or even possible. Instead, the functional delays of active procrastination are to be expected. Though, the functional delay that active procrastination entails is differentiated from passive and non-functional delays of

work both in intent and effect. In addition, devaluation of future rewards is pervasive. This devaluation is often described in monetary terms, but it is no less present with time, and no less applicable to academic tasks because the perceived value is present-biased. As it relates to college, passing classes and graduating are all future rewards, which are easily devalued. Framing procrastination in terms of temporal discounting provides a framework for productive conversations about the varied reasons by which student delay their work. Finally, the prospect of completing a semester of college is a complex project. Successful completion of complex projects benefits from a detailed understanding of tasks that need to be completed, how long they will take, the costs of completing those tasks, the critical path for completion, and the amount of resource slack students have. Procrastination is a complex behavior that resists simple aphoristic advice.

This research provides a productive framework for student success advocates when talking about procrastination with students. These conversations are necessarily individualized, because each student discounts academic projects at a different rate, has a unique ideal path towards the completion of their work, and has a varied set of external responsibilities to contend with. As Alvares and Risko (2000) suggested “. . . educating is a process of deliberate intervention in the lives of students to change the meaning of the experience. The change that education prompts empowers students to become self-educating; they learn to take charge of their own experience” (p. 207).

Significant educational interventions are not all curricular, or even programmatic in nature. Rather, many authentic interventions happen as a result of profound questions stemming from the lived experience of students. Learning assistance programs and centers have already emerged as an important venue for the deliberate interventions that Alvares and Risko (2000) mention, and the utility of the interventions for students in this context stem from the fact that learning assistance appears at the “crossroads of academic affairs, student affairs, and enrollment management” (Arendale, 2010, p. 54). Further, these programs support students across the wide “continuum between novice and master learner” (Arendale,

2010, p. 2), and serve a critical role in helping students from diverse backgrounds attain their educational goals (Payne, Hodges, & Hernandez, 2017). Further, due to the individualized nature of procrastination and workflow interventions, the learning assistance center is a perfect place to house these types of interventions. In the context of the supportive relationships that are developed in learning assistance centers, students regularly face their own academic habits and preferences and come to grips with the inadequacies of their academic workflow. It is therefore also this context that houses individualized interventions towards productive workflows, and away from passive procrastination. A few suggestions follow that should be kept in mind when dealing with conversations about student workflow.

First, help students to accurately assess the value of their varied academic tasks. Temporal discounting research confirms a pervasive devaluation of future rewards. All of the academic projects students are engaged in college to have rewards that are predominately received in the future – passing a test, completing a class, graduating, finding a career. Bringing these future rewards into focus is critical for procrastination to be productive. In addition, given the fact that the more distant a reward seems the lower its perceived value, assignments can be framed in ways that make them seem closer in time. Therefore, one useful way to mitigate this devaluation of rewards is to talk about assignments being due in smaller measures (one month or four weeks rather than 30 days) or to use specific deadlines.

Second, encourage students to be aware of their full workload, not just focus on their academic tasks. College students have a myriad of responsibilities. Accounting for these factors in some way again provides structure to task(s) completion and provides potential start dates as well as timelines for when a task must be crashed in order for completion. Again, this is an opportunity for educators to provide a space for students to consider their obligations holistically in order to organize and prioritize them effectively. Students are going to procrastinate, but helping them build effective project management skills will help ensure that their procrastination will be active, rather than passive and non-functional. To this end, project management offers a structure for successful navigation of the all-encompassing

nature of school. Functional delay of work is often necessary, but it is only productive in relation to the full scope of one's life. Tasks can only be delayed so far. Students have to avoid the overestimation of resource slack and must recognize the costs associated with task crashing, but they may be left to do so without the full consideration of all of the tasks they need to complete.

Finally, support students to develop a clear and accurate understanding of their skills, abilities, and resources. In part, this is a matter of efficiency. Accurate assessment of the time and effort it takes to complete work is a highly individualized matter and is therefore at home in the context of learning assistance relationships. Students are the ones who must do the work and know all that is expected of them; we as educators cannot do the work for them. However, we can help them understand how to leverage their strengths and overcome their limitations and build productive strategies for effectively and efficiently completing their academic tasks.

One crucial factor for student success is the development of a productive workflow, which will include functional delay of required work as a matter of course. Although we support students' decisions to make functional choices about the timing of their work, we are not advocating that students procrastinate in the colloquial way. Indeed, students cannot expect success when they delay work because of apathy. Instead, students must be encouraged to develop intentional and productive structures for managing their varied workload and of efficiently bringing tasks to completion. Here, we advocate for students to procrastinate in a more productive way, that is, to procrastinate better.

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The Benefits of Utilizing Learning Management Systems in Peer Tutor Training

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Abstract

Tutor training programs are essential for the success of a learning center. For the learning center to adequately serve its students, the tutors must be given proper training, support, and guidance. By utilizing technology, especially learning management systems (LMS), in tutor training programs, learning centers can raise their quality of tutors and contribute to the success of their students through these tutors. The following article will show how one University is using an LMS as part of their tutor training program. In addition, the definition, basic uses, benefits, and challenges of LMS will be addressed. If used effectively, other institutions can use their own LMS as a low cost way to improve their learning center's training program.

Introduction

A majority of universities and colleges in the United States and around the world use some type of Learning Management System (LMS). In fact, "the Campus Computing Project's most recent survey of nearly 500 institutions found that only 7% had not selected a learning management system for campus-wide use" (Kats, 2013, p. 1). LMS' allow educators to track student progress and manage their course (Stantchev, Colomo-Palacios, Soto-Acosta, & Misra, 2014, p. 612). Cheng, Safont, Basu, & Goebel (2010) define an LMS as "a software for planning, delivering, and managing learning events within an organization, including online and virtual classrooms and instructor-led courses" (p. 21). Popular Learning Management Systems include Blackboard, D2L (Desire to Learn), Moodle, Canvas, and eCollege. As of 2016, Blackboard was the most popular LMS with almost 1,200 institutions using the platform, which makes up

31.9% of the market (Edutechnica, 2016, n.p.).

Learning Management Systems have been around since the 1960s with the introduction of the PLATO system (Programmed Logic for Automatic Teaching Operations), and “it was the first system to combine graphics with touch-sensitive screens that were used in learning” (Cheng et al., 2010, p. 25). The purpose of an LMS is simple, coursework that was traditionally done in the classroom, such as testing, lectures, and discussions, can now be housed and completed online. LMS’ will continue to change and grow as the technology does, but the goal has always been the same: learning management. It is up to the students and educators to utilize an LMS for effective and efficient learning to take place.

Since the ultimate goal of an LMS is to manage, then it should be utilized outside of the college classroom. At West Chester University of Pennsylvania (WCUPA), both faculty and staff members can request D2L pages be set up for non-coursework purposes. All courses at the University are automatically assigned their own D2L page and class rosters are automatically updated. If a staff or faculty member wants a D2L page, they must fill out a request. As the Assistant Director of the Learning Assistance and Resource Center (LARC), I filled out a request to have three D2L pages set up for the purpose of tutor training.

The LARC at WCUPA is certified and trains its tutors through the College Reading and Learning Association (CRLA). There are three levels of tutors, which is why I requested three D2L pages, one for each level. This was a brand new idea for the spring 2019 semester. Prior to this, all training was done in-person, weekly assignments were emailed to the facilitators, training materials were printed and handed out to the trainees, attendance was taken by hand and materials were stored on computer files within the department. After going through a few semesters in my new role as Assistant Director of the LARC, I thought there must be a better way. The better way is using D2L, the LMS used by WCUPA, to organize materials for all the level trainings.

Benefits of Learning Management Systems

There are numerous benefits to Learning Management

Systems (LMS). Professors of courses or facilitators of training can use online tests or quizzes to gauge progress and knowledge of students, post materials or lectures, host discussions amongst students, have students submit assignments through the platform, mass email the class list, and much more. “The LMS brought together content delivery, communication, assessment and administration of online instruction into a single secure platform that could be accessed by anyone on the internet” (Kats, 2013, p. 4; as cited in Dabbagh & Bannan-Ritland, 2005; Ullman & Rabinowitz, 2004). By using a LMS in tutor training programs, all tutors need is their cell phone or another electronic device to access the training materials during in-person sessions. They also have the ability to access these materials, ask questions, and participate in discussions outside of sessions from virtually anywhere.

Other benefits include accessing materials at a later date, the ability to go at the learner’s pace, the chance for learners, who may not participate in classroom, to express opinions outside the classroom, and the opportunity to carefully time and plan out a semester (Dehinbo & Odunaike, 2010, p. 5). In addition, instructors can hold irregular office hours, video conference, hold virtual classes when there is poor weather, hold exams, record lectures, and create space for peer feedback (Hampel, 2014, p. 36). The list of benefits goes on; however, it is up to the instructor to use all of the full tools the LMS software offers. It is also beneficial when all of a student’s professors are not only all using virtual learning as part of their courses, but also using the same software. It happens in all institutions; professors may either not use online learning tools or use a different one than that of the university. For the students to receive the full benefits of a LMS, the instructors of their courses should all use the same system and use it more efficiently.

Challenges in Learning Management Systems

While Learning Management Systems (LMS) have multiple benefits, there are also challenges to these online platforms. Stantchev et al. (2014) summarizes those challenges in three points. First, all of the tools the LMS’ have to offer are not always used by the educators designing their pages. Second, the timeframe of quarters,

semesters, and trimesters are constraining students and limiting time to collaborate. Lastly, “LMS are usually focused on the course and institution rather than on students and their needs” (pp. 612-613). For example, a tool, such as Google Drive, allows students to organize all their coursework and keep that information for as long as they wish. LMS’ are designed for the professor’s benefit: to help them grade, check for understanding, and have one place to put all of their learning materials.

There are many different features in the majority of Learning Management Systems. If the LMS is only used to post course content and grades, then the educators are not utilizing the full functions of the LMS. A second issue is that the majority of institutions utilize a semester schedule. Since courses are set up for a semester, students are only engaging in the coursework during the semester and may lose access after the semester is over or they graduate. Finally, LMS’ may not be focusing on student needs. Instead, they focus on the needs of the professors to grade, post assignments, and upload content.

In addition to these three main issues, “social networks, cloud based services and mobile applications come to support and complement the lack of LMS’ features” (Stantchev et al., 2014, p. 613). Put simply, there are many e-learning tools available for educators to use outside of Learning Management Systems. The Learning Apps project is one example of putting all of these tools and systems in one place for educators (Alier, Mayol, Casañ, Piguillem, Merriman, Conde, Garca-Peñalvo, Tebben, & Severance, 2012, p. 118). LMS’ should be more involved in these types of projects to bring online learning to the current generation. A study conducted by Stantchev et al. (2014) found that:

Dropbox receives better valuation than LMS for the three considered constructs: attitude toward using, perceived ease of use and perceived usefulness. These results show the limitations of LMS with regard to collaborative work and information/knowledge sharing. Thus, higher education institutions must prioritize general learning needs and student collaboration rather

than focusing on academic and institutional objectives.
(p. 617)

While this study used Dropbox as a comparison for LMS, an argument can be made for the popularity of Google Drive. Studies have shown that students would rather use and find more benefit in using cloud file sharing services, such as Dropbox and Google Drive, rather than a LMS (Sadik, 2017, p. 2). There are also many tools outside of file sharing that Google Drive uses that benefits students. “One of these tools is Google Forms, which allows instructors to develop quick assessments for students (e.g., quizzes or surveys), collect information from students, or create rubrics for assignments” (Sadik, 2017, p. 3). Other helpful tools on Google Drive include Google Docs, Google Sheets, and Google Slides, which allows students to all work on the same document, sheet, or presentation at the same time from different devices.

When institutions are purchasing an LMS, they have many people to keep in mind, including faculty, staff, and students. “It’s hard to buy a product that will satisfy the needs of an entire community, especially for complex processes like teaching and learning” (Feldstein, 2016, para 2). In addition, there is usually a resistance to change when it comes to changing technology in an institution. The students are continuously filtering in and out, but many of the faculty members, especially tenured ones who design their courses on D2L, Blackboard, or a similar site, may be against the change of a new system even if it is more helpful.

Even if a new LMS system would benefit both the student and faculty members, it can be very difficult to get everyone on board. It is extremely important to get all the classroom faculty using the designated LMS for the benefit of the students. If colleges and universities help their faculty members build their online sites, it could make a smoother transition and help all involved.

Tutor Training in Higher Education

Studies have shown that peer tutors, especially new peer tutors, need high levels of support and training from their supervisors (Mcfarlane, 2016). A popular method of tutor training

is certifying tutors through the College Reading and Learning Association (CRLA). “The paramount purpose of the CRLA’s tutor certification process was to set an internationally accepted standard of skills and training for tutors” (Walker, 2016, p. 21). The CRLA goes beyond tutor training and also offers support for tutor selection, experience, and evaluation (Walker, 2016, p. 22).

Learning centers are certified through the CRLA, and there are over 1100 certified institutions in seven countries, including the United States (Walker, 2016, p. 22). The post-secondary institution is the one that becomes certified through the CRLA, not the individual trainer or tutor. “Once certified, the tutor training program is authorized to certify tutors as they meet the certification requirements” (CRLA, 2018). West Chester University of Pennsylvania is a Level III certified Institution through the CRLA.

New tutors spend their first semester in weekly Level I training sessions with the Director or the Assistant Director of the Learning Assistance and Resource Center. Some of the topics for Level I training include: tutoring definition and responsibilities, tutoring guidelines and tutoring do’s and don’ts, techniques for beginning and ending tutoring sessions, learning theory and learning styles, role modeling, communication skills, active listening and paraphrasing, referral skills, study skills, problem solving, etc. (Schotka, Bennet-Bealer, Sheets, Stedje-Larsen, & Van Loon, 2014). The goal of Level I training is to help college students develop from an excellent student to a component tutor because those two things are very different. At the LARC, we define a component tutor as one who is able to help our undergraduate students become independent and active learners. For us, it is not simply about helping the students gain the A in a course but helping them understand the content on a deeper level and making them aware of their own learning styles and study habits. By using D2L in tutor training, this makes the task of creating component tutors much easier. In addition, it adds another layer of support for these new tutors.

At WCUPA, tutors have the opportunity to continue their tutor training through Level II and Level III CRLA certifications. While Level I is mandatory for new tutors, the LARC does not mandate the other two certifications. There are incentives in place to make

students want to obtain these extra certifications, such as pay raises, leadership opportunities, and the obvious enticement of a résumé booster. These two certifications give the tutors the opportunity to become advanced in their tutoring, conduct training sessions for other tutors, and assist in observing, supervising, and mentoring newer tutors.

Utilizing Learning Management System in Tutor Training Programs

West Chester University of Pennsylvania utilizes D2L as its Learning Management System. “Content Delivery in D2L is structured like a table of contents, which permits the learner to progress in a logical manner through the course” (Kats, 2013, p. 13). As a pilot program, D2L pages were set up for CRLA tutor training over the winter break, prior to when the tutors would be using the platform for the spring semester. Since this was a pilot program, we anticipated there would be trial and error and improvements made throughout the semester. In the following sections, the focus will be on the D2L features that are used by the facilitators of tutor training. These include content, attendance, assignments, discussions, and class list.

Content

Prior to using D2L pages, all tutor training materials were kept on department computer files that could only be accessed on-campus. The facilitator would typically print out enough copies of the materials for everyone. Besides the fact that this was tedious and time-consuming, it was a major waste of paper and the majority of materials were trashed at the end of the semester anyway. When done correctly, e-learning makes it easier for the user to access training materials and contribute toward a goal of a more sustainable campus (Wheeler, Byrne, & Deri, 2003, p. 102).

Currently, all training materials for Level I: Novice Tutor, Level II: Advanced Tutor, and Level III: Master Tutor certifications are on the D2L pages under the content section. Tutors can follow along during training and facilitators can access the materials from any tablet or computer. In addition, a syllabus has been created for each level, which is also available under the content page. Finally, handouts

for individual hours of training are posted under the content section. For example, all trainees must complete a “Colleague Observation” of a certified tutor and attend an “Academic Success Workshop” on campus. The observation requires a form that must be filled out by the trainee. By making it available online, tutors can fill it out and submit it on D2L or print it and complete by hand. For the workshop, students must print and gain the facilitator’s signature.

Attendance

The attendance tool on D2L is a simple one. The platform uses the class list and the facilitator of the D2L page must create an attendance register. At the LARC, we use the pre-designed register. All the facilitator needs to do is add a “P” for Present or an “A” for Absence. For Level I and Level II training, there are three different training times and two-three different facilitators. If a student misses a training session, this makes it easy for them to attend any of the others. Prior to the D2L pages, attendance was taken by paper, given to the Assistant Director, and entered into excel pages that were kept on department computer files. It has happened where a facilitator lost the attendance sheet, making it difficult to enter and keep accurate attendance records.

Assignments

There are a few assignments for all levels of training. For Level III training, the tutors must plan and run a Level I or Level II training session, complete formal tutor observations, mentor new tutors, and complete a final assignment. Previously, the trainees would complete an assignment and email it to the Assistant Director. For Level I and Level II training, the assignments include independent work and a final essay. The system automatically timestamps and places submitted assignments in alphabetical order, which is a useful tool for the facilitators. The facilitators also encourage the tutors to use the assignments tab to keep track of their work for training and use the tab to create a tutor portfolio.

Discussions

Prior to using D2L, tutors in training would send “Independent Follow-Ups,” short reflections based on a question posed at the training session, directly to the Assistant Director via email. The Assistant Director would attempt to filter these responses

by having them go to its own folder; however, this only worked if the tutors remembered to use the correct subject heading. Now these short reflections are on discussion threads on D2L. This is used on all three CRLA levels. All the tutors in that level of training can see each other's responses and are encouraged to respond to others and engage in meaningful conversations. "Using a platform of your preference for online discussions, students can build a learning community around discussion topics, participate at their own pace, allow different types of student learners to contribute, and increase individual student learning" (Lieuw, 2014, n.p.). This has been great for tutors who are more hesitant to participate and voice their opinion during in-person sessions. I find many of the tutors shine in their writing ability and are able to give meaningful and thoughtful responses to the given prompts.

The discussion board has also been used for tutors to ask questions about training, tutoring, or the LARC in general. This second part has been used more in Level I training, as this is for new tutors. These can be asked and answered anonymously. While the professional staff of the LARC considers themselves approachable, tutors may be worried about asking questions they deem simple. This is a place for them to ask those questions and the Director or Assistant Director can answer.

Class List

Since LMS lists all students enrolled and their email addresses, it allows the instructors to email the entire class, select people, or just one person in the course. In addition, this is where the facilitators can add leaders, other instructors, or guest contributors to the course. For the purpose of tutor training at the LARC, the Assistant Director adds numerous leaders to the course, including other tutors who help grade submitted material and keep track of attendance.

Future Plans

Next semester, we plan to utilize D2L at the LARC in a new way in addition to using it for the above training purposes. Many organizations on campus will use a D2L page for their student workers or volunteers. Our department will enter all active tutors into the site (and then remove them if they choose not to return

for the next semester, while also adding the new hires). The site makes it easy for all leaders on the page to send mass emails. In addition, we'll post our tutoring handbook as a digital copy versus a printed copy to make it more available to tutors and help in the department's sustainability efforts. This is also a great place to post announcements, including orientation details, meeting times, training dates, weather related closings, etc. Finally, handouts can be posted on the site, such as paper time-sheets and observation papers.

Since the training sites are permanent and will be used from semester to semester, the facilitators of training will continue to build the tutor training D2L pages. Right now, the department is using the basic features of D2L, which are all listed above. The department would like to move into more advanced features. One example includes creating tutorial videos to post on the D2L site, such as narrating tutoring scenarios for training. This would be in place of the scenarios being written out and posted on the site. I will continue to research LMS' and how to best utilize them in a training setting. The ultimate goal would be to create a guidebook that can be used at any institution, regardless of designated LMS, to create online training for tutors or similar organizations.

Conclusion

Learning Management Systems are used in most colleges and universities in the United States. One of those Learning Management Systems, D2L, is used in 11% of institutions as of 2011 (Campus Computing Project, 2011, n.p.). One of those institutions is West Chester University of Pennsylvania, where online courses are available. In addition, faculty and staff can request D2L pages be set up for program or training purposes.

The Learning Assistance and Resource Center at WCUPA is a learning center that trains its tutors through the learning outcomes and standards of the College Reading and Learning Association. For the first time, D2L pages were set up for all tutors as part of a training course for the spring 2019 semester. It has been extremely successful by giving the tutors access to training materials, online discussion boards, utilizing attendance tools, and having assignments turned in electronically. While there are many benefits to LMS, there

are also many challenges. If these challenges can be addressed, while best practices are studied, a learning center can create a more meaningful and productive way of supporting and training its peer tutors. This would not only benefit the tutors and facilitators but would trickle down to the success of the students.

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Embedded Tutoring to Enhance Dialogic Feedback and Improve Student Self-Regulation

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Abstract

Online higher education writing centers are often viewed as a space separate from students' learning environment; a landscape of assistance rather than true education. The goal of this pilot program was to create a geography of shared experience between students, faculty, and writing specialists to facilitate the process of enhancing student self-regulation of and self-efficacy for writing. This was accomplished through an embedded tutor pilot in which professional online writing center staff members engaged in early capstone courses for fully-online doctoral programs. The pilot also aimed to enhance faculty efficacy for supporting student writing.

Embedded Tutoring to Enhance Dialogic Feedback and Improve Student Self-Regulation

The goal of this project was to facilitate the process of enhancing dialogic feedback and student self-regulation through an embedded tutor model in which professional Online Campus Writing Center (OCWC) staff members were embedded in early dissertation courses for fully-online psychology doctoral programs, including international psychology, applied behavior analysis, and organizational leadership, to provide academic writing feedback on major written assignments that serve as the precursor to the traditional five-chapter dissertation or master's thesis. Students in these programs are 80% female with a mean age of 33.5. More than 24% of students identify as Black/African American, 16.3% as Latina(a)/Hispanic, and 40.8% as White/Caucasian. Approximately

3% of students identify as International.

Quality written feedback, particularly when it is timely and proximal (Gredler, 2018), can develop strong relationships between students, faculty, and support staff—those who make up the dialogic triad—and can clarify confusion and enhance engagement regarding the academic content and academic expectations of graduate students' writing. To promote feedback improvement, the embedded tutor model aimed (a) to enhance faculty competence in identifying student writing deficiencies and enhance faculty self-efficacy for referring students to appropriate writing support resources by modelling effective in-line, proximal feedback using MS Word and modeling effective technology-enhanced feedback for specific learning, such as screen-casting and images, and personalized summative feedback and (b) to allow online writing center staff members to work alongside faculty, increasing students' understanding of writing-related feedback, self-regulation, and motivation for improving their academic writing at an early point in their dissertation or thesis journey.

Early intervention that applies Gredler's (2018) recommendations for proximal, customized, and personalized writing feedback helps students self-regulate the writing process and better understand how to improve their skills and leverage services available to them. In this context, self-regulation refers to the student's ability to self-initiate the writing process, including writing, revising, and seeking support. Supporting students in the thesis or dissertation process, in turn, requires that writing support professionals be mindful of timing, negotiation with committee members, and other impacts on the student writing process. Modeling this to faculty can provide a new set of parameters for how to manage their and their students' expectations of and regulation for academic writing. However, Morris (2017) warns:

The worst best practice is to adhere to, or go searching for, best practices. I have been in countless rooms with teachers, technologists, instructional designers, and administrators calling for recommendations or a list of tools they should use, strategies that work, practices

that cannot fail to produce results in the classroom. But digital tools, strategies, and best practices are a red herring in digital learning. Learning always starts with people. Instead of asking ‘What tool will we need?’ ask ‘What behaviors will need to be in place?’ (para. 34)

The dialogic feedback process does just that: establishes what behaviors need to be in place to foster effective learning, particularly in the digital realm. The embedded tutor pilot program was launched in order to bring the writing center into the online classroom. Embedded tutors integrate required and student-initiated feedback, emphasizing dialogic tutoring as a behavior, not a best practice, critical to digital pedagogy. In other words, embedded tutoring brings writing support both to audiences that would have sought it out and to audiences that would not have otherwise known its benefits. Feedback is provided to students via asynchronous reviews leveraging MS Word track changes and comments as well as screen capture and audio feedback using platforms such as Screencast-o-Matic. Embedded tutors also offer live sessions to both the faculty and students via GoToMeeting during which they model the revision process.

By leaving the writing center space and entering into a space normally reserved for student-faculty interaction, online writing center staff are able to enhance not only the appreciation for writing center work but also the dialogue surrounding it. In addition, working within a course allows writing centers to engage more actively not only with students and faculty but also with curricular outcomes. Moving away from independent, isolated programming into the classroom challenges the very nature of the writing center paradigm, yet early research shows that significant impacts can be made on student success and retention when such integration occurs (e.g., Carpenter, Whiddon, & Dvorak, 2014).

The pilot program has refined the traditional canvas of tutored writing feedback, teaching appreciation for the craft to faculty by modeling online writing feedback best practices and the art of dialogue. Such feedback “contributes to student self-regulation: the planning, monitoring and evaluation of learning, and the adaption

of learning strategies to task demands and progress” (Pekrun et al., as cited by Yang & Carless, 2013). In particular, dialogic feedback contributes to students’ ability to complete iterative writing projects, such as dissertations and theses, that rely on students’ abilities to self-regulate their learning.

Background & Theoretical and Empirical Framework

Primary to the growing imperative to better serve online graduate students is what Yang and Carless (2013) referred to as a dialogic feedback process, which most effectively fosters student self-regulation and learning in higher education contexts. Online graduate education is driven by accountability and assessment, integral to which is the feedback process: the manner in which instructors are providing and students are receiving feedback on their work and their learning. Feedback “contributes to student self-regulation: the planning, monitoring and evaluation of learning, and the adaption of learning strategies to task demands and progress” (Pekrun et al., as cited by Yang & Carless, 2013). Feedback must go beyond fostering students’ skills and content knowledge to help them develop critical judgment, problem-solving, self-reflection, and appraisal (Yang & Carless, 2013). Yet, “students find the effectiveness of feedback one of the least satisfactory aspects of their university experience” (Yang & Carless, 2013, p. 285). A dialogic style of feedback, however, contributes to students’ abilities to regulate their desired level of understanding and their current actual level of understanding, and includes three dimensions: “cognitive, social-affective and structural” (Yang & Carless, 2013, p. 287).

The cognitive dimension of dialogic feedback is primarily the domain of the faculty member of the particular course/discipline in that it involves providing feedback on the content technique, strategy, and overall quality of student work as it relates to the specific field. The social-affective domain is where a specific management is required of the relationship and balance of power between the instructor and the student. For example, if a student has a low level of experience with and knowledge of the field and is being assessed at a higher level of understanding, then their social-affective dimension of feedback might be negatively affected. This, in turn,

prevents the faculty member from helping the student to achieve increasing self-efficacy for learning as their sense of belonging to and having an identity within the discipline is limited (Yang & Carless, 2013).

This is particularly problematic when the student experiences a perceived imbalance of power between themselves and the instructor. However, as Yang and Carless (2013) indicated, a tutor relationship can help to enhance student performance by bringing balance to the student relationship with the institution (Yang & Carless, 2013). The structural dimension of dialogic feedback is the timing, methods, modes, and physical platforms in which feedback takes place and offers the most opportunity for support staff to collaborate with faculty to enhance the other two dimensions. By partnering in the online learning platform, writing center staff members and faculty can together offer enhanced cognitive and social-affective feedback to students, creating a dialogic triad between faculty, student, and support staff.

Significance

An embedded model within online writing centers can promote dialogic feedback, level the balance of power, leverage technology for more efficient and open communication, and model to faculty how to navigate the grounds of both discipline-specific and academic-specific writing expectations. In essence, expanding the scope of instruction early, alerting the faculty member of how dialogic feedback can translate across institution platforms and departments, will strengthen both faculty and student confidence and, ultimately, the students' ability to self-regulate as they progress to higher levels of capstone writing.

Methods

This project was not intended as a formal empirical research study, but rather as a precursor to such. The embedded tutor pilot launched with the Spring II term start, with three writing specialists (tutors) embedded across six doctoral-level capstone online course sections (See Table 1). Specialists included one master's-prepared writing and ESL specialist, one EdD-prepared higher education

writing and dissertation specialist, and one PhD-prepared writing and dissertation specialist. The master's-level specialist was embedded in the master's-level courses and the EdD and PhD-prepared specialists were embedded in the doctoral-level courses.

During the term, embedded tutors/specialists:

- Posted weekly announcements and writing tips using a combination of text, image, and video.
- Selected 1-2 assignment(s) on which to provide 1:1 writing feedback (most were scheduled during Week 4 of the 8-week courses).
- Delivered one real-time Manuscript Review webinar to demonstrate the processes of feedback and revision and/or provided 1:1 live sessions to students and faculty. In some sections, the live session was offered once to all students and the faculty member. In other sections, each live session was offered separately to each student. This was determined on faculty preference as faculty attendance was strongly encouraged.

In addition, prior to the start of the Spring II term, the OCWC:

- Created of a suite of over 25 writing tips (text, image, and video-based) to enhance dialogic feedback from tutors and faculty to students. Embedded tutors/specialists posted these as “Weekly Tips” in their assigned classrooms, selecting those most relevant based on course description, assignments, and course outcomes, and faculty were encouraged to use them in their feedback as well.
- Developed and launched to faculty in the pilot the Feedback Repository with writing tips organized by writing pathway, category, and topic, providing faculty a user-friendly, centralized method for learning about how to provide writing feedback as well providing faculty with a set of accurate, standardized tips they can use in their feedback to students.

During the Spring II term, the OCWC:

- Delivered real-time Manuscript Review webinars and sessions to students during which faculty were able to observe the processes of feedback and revision.
- Provided 1:1 feedback to students, thus, also providing best practices models for faculty for providing writing feedback.
- Students and faculty in the nonpilot sections did not receive any specific interventions; however, the course syllabi listed methods for seeking writing support through the Online Campus Writing Center and students in all sections continued to have access to the writing center schedule for paper reviews, writing center webinars, and writing center web-based resources and tutorials.

Table 1

Course Sections with Pilot

| Course Name | Pilot Section | # students | Nonpilot Section | # students |
|-----------------------------------|---------------|------------|------------------------|------------|
| Dissertation Proposal Preparation | A & E | 7 | B, C, D, F, G, H, I, J | 16 |
| Advanced Applied Project III | A | 3 | D | 2 |
| Advanced Research Project II | A | 6 | C | 3 |
| Research Experience II | B | 9 | A | 7 |
| Qualitative Research Methods | B | 9 | A | 8 |

Findings

Following the completion of the Spring II term, the writing center collected completed final assignments (or equivalent) from each course, including both the pilot and nonpilot sections. Nonpilot sections were those sections without an embedded tutor. Samples from each set of written assignments were randomized and coded and then blind scored by reviewers using a writing rubric and standardized writing error inventory to determine if a relationship exists between students who experienced an embedded tutor and writing skills. Three paper samples from each section were selected, and each was blind scored by two reviewers. Rubric scores reveal that, overall, students in courses with an embedded tutor produced writing with fewer errors across four categories: APA, Higher Order Concerns, Syntax, and Grammar and Mechanics. Each category was scored 1-4, for a total of 16 possible rubric points. The score

difference between pilot and nonpilot sections was most prominent in Research Experience II, during which students are tasked with drafting a dissertation literature review (See Figure 1).

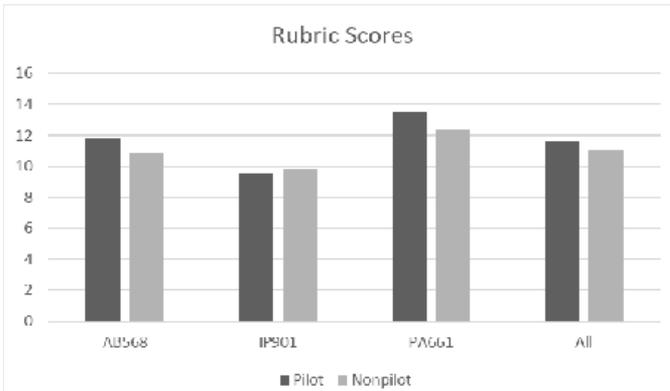


Figure 1. Rubric scores for paper samples across all pilot and nonpilot sections. AB/PA—Applied Behavior Analysis; IP—International Psychology.

In addition to rubric scoring on major assignments, during the final week of the Spring II term, the writing center administered a 10-item Writing Self-Regulation Inventory to students in each course, including both the pilot and nonpilot sections. Scores were analyzed to determine if having an embedded tutor affected students' perceptions of writing skills and self-regulation. In addition, all results helped to further understand the broader population's writing self-regulation and served as an additional validity measure of the tool. Students in the pilot sections were informed that their course was participating in the OCWC pilot program, and students in both the pilot and nonpilot sections were asked to complete the inventory to help inform OCWC service and resource development.

Areas of self-efficacy for and self-regulation of writing that scored higher among pilot students than nonpilot students included:

- I am able to learn from my mistakes with clear feedback,
- I seek out resources for improvement, and
- I learn from my mistakes from one draft to the next.

These three areas are critical to sustained writing (and overall academic) success of students and are a promising demonstration of how having a tutor to complete the dialogic triad can positively impact student experience and success. Students in the nonpilot sections of the International Psychology (IP) courses reflected stronger self-regulation scores. Follow up is needed to determine specific reasons for this.

In addition to evaluation of the pilot program's impact on students, we administered a final faculty self-efficacy assessment to both pilot and nonpilot faculty (see Figure 2).

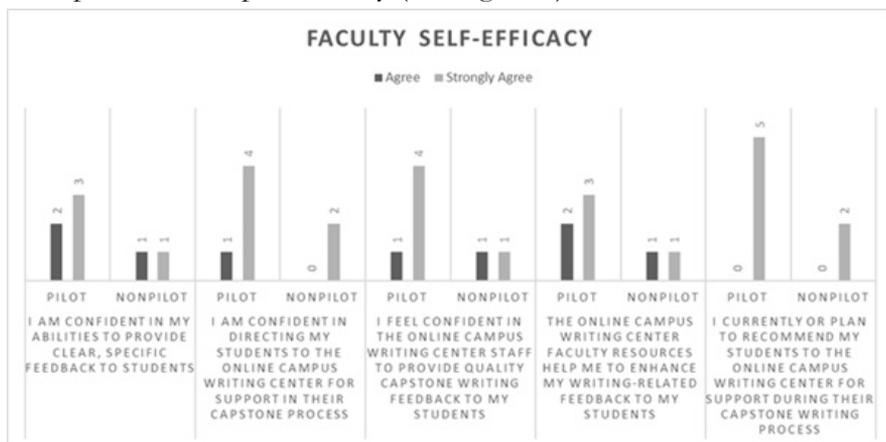


Figure 2. Faculty Self-Efficacy Assessment scores.

Faculty in the pilot scored higher in all areas of self-efficacy for writing support over faculty in nonpilot sections, showing that having a writing professional in the course can enhance faculty's own self-efficacy for writing and improve understanding for how to better support and dialogue with students about writing.

Discussion

This was a small pilot study with a group of prepped instructors and program directors willing to engage with the online writing center. Although we identified possible positive outcomes, there is a need for continued data collection to more thoroughly analyze the impact(s) of having embedded tutors within courses. For example, it appears from this initial pilot that embedded writing specialists in graduate courses has some positive effect on academic

writing efficacy among students. When feedback is provided in a safe learning environment, students are able to receive and utilize the feedback more efficiently and effectively. Instructors are also able to focus on content and allow the writing specialists to address the writing so students can more fully convey and apply their growing content knowledge. In this manner, students are able to simultaneously receive more content-focused feedback from faculty and more writing-specific feedback from writing specialists. In addition, the program directors made the initial decision to participate in the pilot and instructed their faculty members on what to expect and what was expected of them. We acknowledge that faculty participation might not be so readily obtained in the future as the program grows.

Carpenter, Whiddon, and Dvorak (2014) noted, “classroom and writing center geographies are seen as distinct, situating teaching and tutoring within different pedagogical landscapes” (p. 3). As Carpenter et al. recommended, our embedded tutoring pilot laid the initial structure needed to bridge this pedagogical divide. The next steps will be to extend and formalize our pilot to a new set of courses, focusing on classes that students take at the outset of their program and, more specifically, on developing writing self-regulation, self-efficacy for writing, and writing skill sets early on in students’ graduate writing journey. As DeLoach, Angel, Breaux, Keebler, and Klompien (2014) emphasized, during students’ initial exposure to higher-level writing, having a tutor present can provide a “communicative bridge between the instructor and the student” (p. 10). Such a bridge assist both the faculty member and the student by enhancing the learning dialogue, leveling and aligning expectations, and contributing to student self-regulation of and self-efficacy for the writing process.

In addition, future iterations of the pilot will need to include more intentional data collection processes, ensuring the ability to collect longitudinal data for students who experience an embedded tutor early on in their program. Future pilot models should also include tracking writing rubric scores by individual category to gain a better understanding of what specific writing skills embedded tutors are and are not able to improve.

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The Learning Assistance Review (TLAR), the national peer reviewed official publication of the National College Learning Center Association (NCLCA), publishes scholarly articles and reviews that address issues of interest to learning center professionals (including administrators, teaching staff, faculty, and tutors) who are interested in improving the learning skills of postsecondary students. Primary consideration will be given to articles about program design and evaluation, classroom-based research, the application of theory and research to practice, innovative teaching and tutoring strategies, student assessment, and other topics that bridge gaps within our diverse profession.

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