STUDENT PERCEPTIONS OF ONLINE WRITING CENTER DESIGNS FOR FULLY ONLINE PROGRAMS

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In this multiple-case study, the author investigated fully online students' perceptions of and experiences with asynchronous and synchronous writing support options of an institutional writing center and a commercial tutoring service. This dissertation used a multiple-case study design (Merriam, 1998, 2009; Yin, 2009) to ascertain which features of these writing assistance options fully online students perceive as the most and least helpful for improving their writing skills and why. Data sources included a survey of 550 fully online students and two rounds of email interviews with 13 of the survey respondents. Survey and interview questions were structured within a conceptual framework of online writing center design, categorized by features affecting levels of convenience, connectedness, and academic progress. Survey and interview data analysis included within-case analysis (Merriam, 2009) and cross-case syntheses (Yin, 2009). Chapter Four presents the survey results that most closely aligned with the research questions and conceptual framework. Chapter Five shares the individual case profiles of 13 participants' experiences with their selected writing assistance. Chapter Six displays the results of four cross-case syntheses, creating a holistic picture of the four services from participants' perceptions of their convenience, connectedness and contribution to academic progress.

Findings from this study contributed to the body of online writing center (OWC) design literature by adding the voices of fully online students as increasingly relevant stakeholders whose preferences challenge the prevailing models of OWCs for onsite students. Findings also

confirmed the effectiveness of prevailing online writing instruction (OWI) theories and practices. Results indicated that fully online students tend to prioritize convenience over academic progress and consider connectedness a relatively low priority when seeking writing assistance. Results also showed that most fully online students prefer asynchronous writing assistance to synchronous and perceive growth in writing skills when tutoring is more authoritative and explicit. Results also confirmed that providing both asynchronous and synchronous options is the best way to ensure the diverse writing assistance needs are met for as many fully online students as possible. These results and others have significant implications for those designing or re-designing OWCs for fully online students.

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CHAPTER ONE

INTRODUCTION

This study of fully online students within the online program of a private university sought to explore these students' perceptions of online writing support designed by two separate services. In particular, the study investigated student perceptions of the university's institutional online writing center (OWC) as compared to their perceptions of a commercial tutoring service. The differences between the two services in terms of their speed, technological delivery, and subsequent tutoring practices raise questions about which aspects of the two centers are best suited to draw participation and improve the writing skills of an increasingly diverse student population. In this study, I describe participants' choice of services, their reasons for those choices and their experiences with those choices. To add to current research and provide insight for OWC designers targeting this fully online student population, this study adds their voices to the ongoing scholarly conversations about online writing instruction and the most effective designs for online writing support.

Research Impetus and Research Questions

Student enrollment in online higher education programs has grown at an astonishing rate. The 2015 Survey of Online Learning reported that in 2014, more than 2.8 million students (one in every seven) took *all* of their higher education courses online from a U.S. institution in 2014 (Allen & Seamen, 2015, p. 10). Further, 28% of students enrolled in higher education courses in 2014 took at least one course online—more than one in every four students (Allen & Seamen, p. 12). Online student enrollment *increased* 7% from fall 2012 to fall 2014 while overall enrollment in higher education *decreased* by hundreds of thousands, meaning the growth of online enrollments has increased by even more (Allen & Seamen, 2015, p. 14). The survey also

revealed that 63.3% of reporting institutions acknowledge online learning is a vital part of their long term plans, and only 13.7% of reporting institutions said online education was *not* a vital part of their long-term strategy (Allen & Seamen, p. 21). Clearly, online education, its unique student population, and its varied modes of delivery are here to stay.

This reality raises several questions regarding the quality of education online students receive and the quality of the academic support online programs provide. Specifically, in an online environment, students' writing skills become of utmost importance since nearly every student-to-student and student-to-teacher exchange occurs in writing and large percentages of students' grades depend solely upon their writing skills. Therefore, what aspects of different writing support services do fully online students perceive as helping or hindering their growth as academic writers? What can OWC designers and directors learn from fully online students about the most effective ways to meet their writing support needs? Would a commercial service or a homegrown service better attract and serve fully online students within their unique context?

These are the questions I asked myself in 2007 when I was hired to design and direct an online writing center created solely for a university's then fully online population of over 50,000 students. I researched numerous options, from several commercial tutoring companies to various software platforms we might use to build and sustain our own writing tutoring service. After consulting with our Information Technology (IT) team, I considered as best I could the cost of each option, the structure of our online program, and the lives and needs of our online students. I chose to implement an online writing service housed within my institution, offering asynchronous full draft reviews with a 48-hour turnaround, and synchronous sessions conducted by graduate-level peer tutors via Skype. By fall 2008, our homegrown online writing center and its tutoring services were up and running, steadily gaining users until approximately 10% of our

online student population sought our writing assistance. But in 2011, the university also entered a partnership with a large commercial tutoring company that provided access to 24/7 synchronous tutoring via a chat feature combined with a whiteboard as well as asynchronous tutoring via a drop-off draft review service with a 24-hour turnaround. Upon visiting the company's site, seeing its slick interface, and noting its promise to "take the hassle out of homework," I assumed the usage of our institutional online writing center would drop significantly as our online students migrated to this new and seemingly better form of writing assistance. However, our usage did not decrease as expected, though our upward trend of growth has slowed slightly each subsequent year. This surprising result intrigued me and prompted a return to the questions I considered when first deciding what sort of writing assistance would be best for our fully online student population—but this time I wondered what the students themselves might say.

Thus, the impetus for this study was born out of the university's partnership with the commercial tutoring company and my desire to investigate the reasons behind students' choices to use the commercial writing assistance over the institutional or vice versa. The clear differences between the types of writing assistance offered by the outside company versus the institutional writing center provided the basis needed for an exploration of student perceptions of which types of writing assistance, offered by whom, attracted them, suited their lives as fully online students, and improved their writing skills. This study presents these students' perceptions of both services—the effectiveness of each service's perceived levels of convenience, connectedness, and contribution to academic growth. By analyzing survey responses and written interview responses in which students describe their experiences with these services, we can better understand what drives their writing assistance choices, and subsequently, the types of assistance fully online students feel best address their writing needs.

Therefore, the aims of this study included the following: (a) to discover which aspects of available writing assistance—institutional and commercial, synchronous and asynchronous—students say are most helpful for improving their writing skills and which are not, and (b) to ascertain *why* these students perceive certain aspects as more helpful than others. The goal in pursuing these aims was to provide fully online students a means by which their voices may be heard in the ongoing conversations about effective practices in online writing instruction and online writing assistance design. In this study, I argue that educators, administrators, and policymakers at institutions with online courses should take these students' perceptions into account as they develop, invest in, and implement online writing centers.

Given these goals, this study sought to answer two main research questions:

1. Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers?
2. What are the reasons for these perceptions?

Significance of Study

Both anecdotal and quantitative evidence demonstrates the wide variety of existing online tutoring models and suggests that many administrators of current and developing online programs or online writing centers (OWCs) would benefit from a study that attempts to answer the aforementioned questions. On various writing center listservs and at conferences such as the Conference on College Composition and Communication, the Computers and Writing Conference, and the International Writing Centers Association Conference, newly-minted and veteran writing center directors alike ask each other about technologies and methods their online centers use, how well they work, and whether they outsource their online writing tutoring to commercial services. The answers are always as varied as the people answering them.

Further, many fully online programs lack any sort of writing support or provide only one kind of support. The College Composition and Communication Committee's 2011 State of the Art of Online Writing Instruction Report revealed findings of a national survey of fully online program directors in which "barely 50%" reported availability of online tutoring (Hewett, 2015a, p. 9). Further, "OWLs that did exist were primarily asynchronous (50.3% for fully online respondents), with fewer synchronous tutorials provided (25.8% for fully online respondents)" and, intriguingly, "22% of fully online respondents indicated they had outsourced tutoring" (Hewett, 2015a, p. 80). Though the percentage of those same respondents who now have OWCs has surely risen in six years, growth in the number of institutions starting fully online programs has exploded in that same period ((Allen & Seamen, 2015). The lack of OWC availability and the variety in those OWCs that do exist, coupled with widespread curiosity among center administrators, demonstrate a necessity for student input. Thus, my study shares what the beneficiaries of these different services have to say about their effectiveness.

My study participants' responses provide insights that OWC designers must consider in their role as technology stewards. Wenger, White, and Smith (2009) introduced the idea of technology stewardship and its responsibilities as "both a perspective and a practice" of those who "adopt a community's perspective to help a community choose, configure, and use technologies to best suit it needs" (p.24). Technology stewards "attend both to what happens spontaneously and what can happen purposefully, by plan and by cultivation of insights into what actually works" (Wenger et al., 2009, p. 24). Hence, the responsibility of a technology steward on behalf of the community she serves is two-fold: to guide the community in its technological choices and usage and to help the community sustain or adapt the chosen technology according to its oft-changing needs. Thus defined, this role of a technology steward is

precisely the role a writing center's director undertakes when tasked with designing an OWC, whether to serve fully online students or better serve on-campus or commuter students who cannot or would rather not visit the physical writing center.

The first step for technology stewards, according to Wenger et al. (2009), is to understand the community they serve (p. 26). Such an undertaking is enormous and complex for writing center leadership, considering the subgroups within the overall academic community who must be considered—the administration, faculty, IT staff, writing center staff, and students. Wenger et al. note that "achieving such understanding [of the community and its subgroups] will require a combination of direct involvement, observations and conversations with community members" (p. 26). My study focuses on the latter requirement, conversing with members of the fully online student community as they describe their experiences with the various features of these two writing assistance sites. As Chapter Two of my study shows, the voices of fully online students are conspicuously absent from the published literature on aspects of OWC design: out of approximately 50 published articles and book chapters on OWC design, only six (Amicucci, 2011; Bell, 2009; Foreman, 2006; Kalteissen & Robinson, 2009; Shewmake & Lambert, 2000; Thurber, 2000) mention students enrolled in online courses; of those six, only one focuses on OWC design for fully online students (Amicucci, 2011). Yet these voices should be crucial to the technology stewards tasked with creating and sustaining OWCs for these students. It is vital for technology stewards, wherever we may be in the process of OWC design or maintenance, to understand our users' perceptions of various online writing assistance options and how the reciprocal relationship between those perceptions and technological environments influence the improvement of writing skills that may or may not take place as a result.

Designing the OWC

"Know your audience" is a concept emphasized in composition courses, speech classes, and writing consultations nationwide, but it is also the concept with which I first envisioned and often re-vision my institution's online writing center. Within writing center scholarship, conference presentations, and listserv discussions concerning online tutoring, very little focuses on OWCs specifically designed for my target audience: students who differ in age-range, life circumstances, and technological abilities from those who typically attend on-campus courses at four-year universities. Thus, I researched and rejected OWC design possibilities on the basis of my extensive experience with fully online students as I had taught them the previous ten years, keeping in mind several concerns: (a) the typical online student's age, circumstances, and technological prowess, (b) the condensed format and subsequent demand of the eight-week online course structure, (c) the Christian worldview from which courses are taught at this university, and (d) the most effective online tutoring practices as they had been discussed in the literature up to that point.

Based solely upon my online teaching experience, I concluded that most students enrolled in our fully online degree programs were adults in the 30-60-year-old age range and are working (and sometimes single) parents who may have limited technological experience and are seeking a degree in order to improve their family's financial circumstances. These impressions stemmed from years of discussion board posts in which students shared why they chose to study at our institution, along with years of observing student difficulties using the relatively simple technology within Blackboard (our learning management system) and Microsoft Word.

Given these impressions of our online student body, in the fall of 2007 I investigated the two most widely-used commercial tutoring services at that time, explored commercial

appointment scheduling services, and even considered creating a writing center within a virtual online world in which students could interact with tutors using avatars. Eventually, I rejected these possibilities in favor of an online writing center the IT team and I could develop and oversee ourselves, thereby ensuring most of the online students could handle its technological requirements, creating job opportunities for some of the online students, and providing writing assistance from peer tutors further along in the same institutional degree programs as the students—tutors with insiders' perspectives and knowledge. I thus set out to create an institutional online writing center with options I thought would best simulate the tutoring practices employed in our face-to face center and best serve the unique needs of the university's diverse online student population.

With a focus on providing students both synchronous and asynchronous options for tutor feedback, I met with the university's technology team to describe what I wanted the online center to look like and do. The result was an online request form submission, tracking, and storage system still in use today, described in detail in Chapter Three. This system allows online students to schedule synchronous appointments via Skype or submit drafts for full reviews via Microsoft Word's commenting tool. They can also email the center with simple grammar and format questions. Students may submit these requests any time of day or night, any day of the week, and receive answers within a few hours and feedback on drafts or live assistance within 48 hours of making their request.

Once instituted, these options appeared to meet the online students' writing needs, and as I made both online faculty and students aware of the services, usage of these options steadily grew toward 10% of our online population, even as that population continued to grow. However, during my first three years of directing the center, I began to notice that students used the

asynchronous option over 30 times as often as they requested the synchronous appointment option. I attributed the trend to the fact that the asynchronous option mirrored the form of communication students were used to using within Blackboard, but even as I hypothesized, I wondered what implications for OWC designs such reasoning might hold if proven accurate.

Adding significantly to my curiosity, at the end of my third year as director, the university partnered with a large, widely-used commercial tutoring company to provide its online students assistance with math and science—but writing assistance automatically came with the package. Now the university's online students seeking writing help had a third option: 24/7 instant access to professional tutors via an attractive whiteboard interface they could reach by computer, tablet, or a free smartphone application. Naturally, I assumed the institutional online writing center's usage would drop, given its limited budget, less attractive and accessible site, and inability to provide instant feedback. But usage did not drop—which only added to my growing list of questions: Why do students use both the institutional and commercial options or choose one over the other? Is it due to website appeal, technological ease, tutoring methods, tutor or service positionality, or other reasons? Which features of these options do they find provide the most effective assistance for improving their writing skills and why?

Research Approach

This case study was a multiple-site case study (Creswell, 2007) conducted on fully online student users of two sites within one context: the online program of a private university. The participants in this case study included both random and purposeful samplings (Merriam, 2009) from nearly 50,000 fully online students enrolled in any online course offered in the first eight-week term of spring 2016. Since case study research often requires data from more than one source (Creswell, 2007), I collected data from two sources, a survey and email interviews. I then

examined the data using multiple methods of analysis: (a) comparison of survey statistics from each group of users, (b) a case study profile of each interview participant presented according to a descriptive framework (Yin, 2009), and (c) a cross-case synthesis (Yin, 2009) of each service's asynchronous and synchronous tutoring options. Using these three methods of data collection and analysis described in depth in Chapter Three, I was able to explore my study's research questions from several angles in order to draw meaningful conclusions from the data and form a clear picture of students' experiences with these OWC designs.

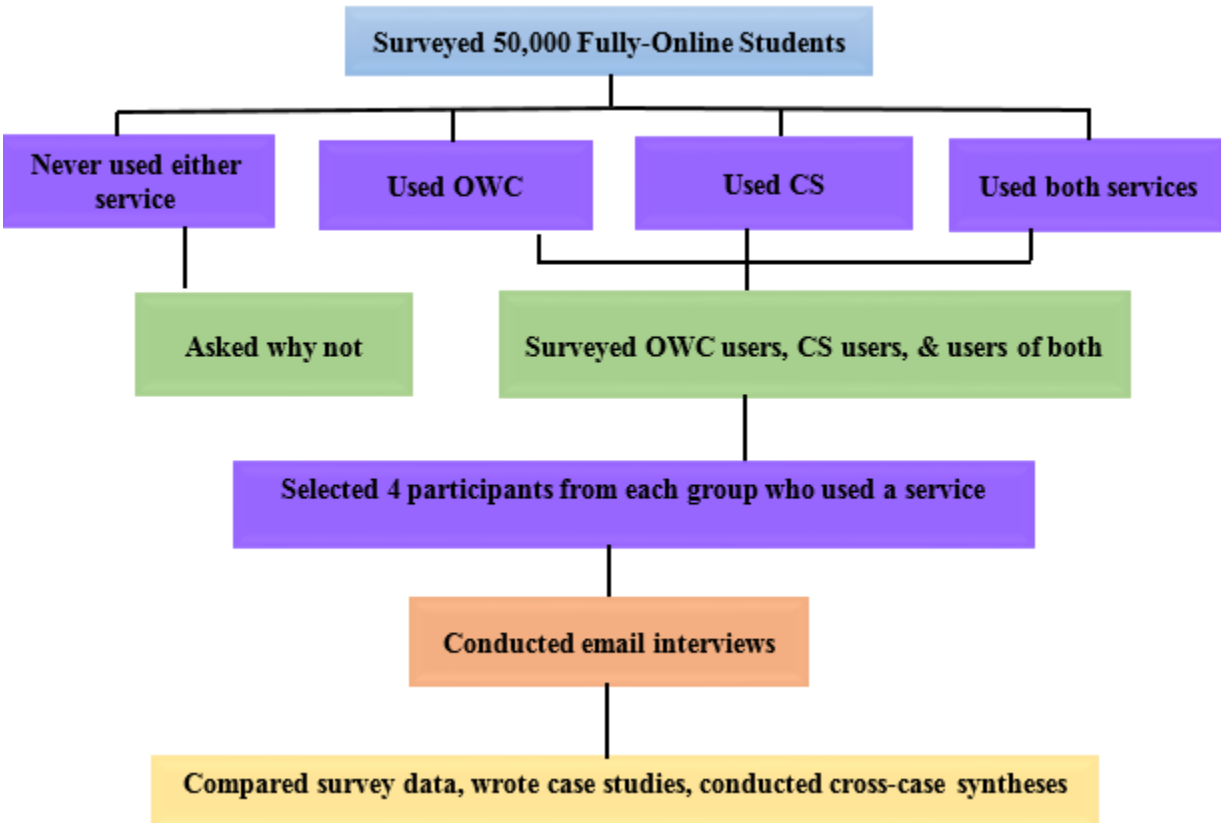

Figure 1. Research approach flowchart.

Chapter Summary

In this chapter, I have stated my study's purpose, its impetus and research questions, and its significance to those engaging in OWC design, particularly for fully online students. I have

also shared a summary of my study's methodology. In Chapter Two, I review OWC design literature from two different perspectives: the stakeholders it includes and the design features it addresses. The former perspective demonstrates the exclusion of fully online students as stakeholders in OWC design, and the latter perspective provides the conceptual framework for my study's survey and interview questions. I also review online writing instruction scholarship—its evolution, stakeholders, and recommended theory and practice—as a piece of the conceptual framework and a more appropriate foundation for the writing tutoring of fully online students than online tutoring scholarship would be. I conclude the chapter with calls for future research by online writing instruction scholars and describe how my study answers one of those calls.

In Chapter Three, I describe in detail my data collection and analysis methodology, addressing concerns of ethicality, particularly my researcher positionality as creator and director of the OWC and thus a highly-invested stakeholder in the study's findings. In addition, I contextualize the study by drawing a clear picture of the institutional, program, and writing center settings and how they somewhat complicate the study's findings.

Chapters Four, Five and Six contain the survey and interview results and analyses. I present the survey results and analyses in Chapter Four with a focus on comparing and contrasting OWC and commercial service (hereafter CS) users' writing assistance goals and priorities, tutor preferences, technological preferences, observations about user friendliness, impressions of online writing instruction practices and other factors influencing perceptions of OWC designs and their helpfulness or hindrance to growth of writing skills. In Chapter Five, I present a case study or descriptive profile of each of the 13 interview participants' perceptions of and experiences with the writing assistance service(s) they had tried by the time the interview took place. Using their own words as much as possible, I describe their pre-session, session, and

post-session perceptions and practices, revealing their diversity of backgrounds, motivations, and writing needs. In Chapter Six, I conduct cross-case syntheses of the interview data, culling it to the point of data saturation in order to form a complete picture of convenience, connectedness and contribution to academic progress for each of the four services: the OWC draft review, the CS draft review, the OWC Skype service, and the CS chat service. In Chapters Six and Seven, I occasionally repeat Chapter Five excerpts of participant interviews where relevant to give voice to their experiences for researchers who wish to read only one of those chapters rather than the entire dissertation.

In Chapter Seven, the final chapter of the study, I discuss implications for OWC design and for online tutoring practices—all supported by evidence from the survey results, case studies, and cross-case syntheses. In these discussions, I note where each perception may have significance for OWC design literature and/or online writing instruction scholarship. I also discuss recommendations for OWC designers, the limitations of my study, suggestions for future research, and my own reflections on how the study has changed me as a researcher and as an OWC director.

CHAPTER TWO

REVIEW OF THE LITERATURE

In Chapter One, I discussed my goal to examine fully online students' perceptions of two very different OWCs and why they might find various components of one more helpful than the other in meeting their writing needs. In this chapter, I provide an overview of literature related to the research questions my study asks to accomplish this goal: Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers and what are the reasons for these perceptions?

First, I explore OWC design literature according to the stakeholders it includes, revealing the absence of fully online students within that literature and the need to add them to that stakeholder list. I then explore OWC design literature according to potential features that may affect students' perceptions of a writing center's convenience, connectedness, and contribution to academic progress—my conceptual framework described in further detail below. Finally, I provide an overview of online writing instruction literature as the final "feature" or component affecting how well an OWC may be perceived as contributing to academic progress. This final overview includes recommended theory and practice for teaching writing online and describes the unique writing assistance instruction needed for students learning to write online versus face-to-face in classrooms. I conclude by discussing how this literature review provides the foundation for my analysis and discussion portions of the study and makes my findings more significant to scholars in these fields of inquiry

Online Writing Center Design

OWC design literature refers to any published literature that discusses any of the aspects—structural components, stakeholders, funding, etc.—that an institution or director must

consider when building an OWC, either as an extension of a face-to-face (f2f) center or as support for their online learners. Most often focused on the former, an abundance of collections and articles was published between 1995 and 2005, primarily comprised of writing center directors sharing their choices, experiences, and results as they designed, piloted, and studied their institutions' OWCs. This proliferation of work was followed by other articles here and there throughout the years that focused on specific aspects of OWC design. For this study, it is important to examine OWC design literature both in terms of its consideration of various stakeholders and its consideration of various design features.

OWC Design Literature by Stakeholder

Examining OWC design literature by stakeholder not only encapsulates all the participants an OWC director/designer must consider as a technology steward, but it also demonstrates a deficiency in the literature's inclusion of certain possible student stakeholders, their needs, and their preferences.

Directors. OWC design literature focused on one or more major considerations for directors designing or re-designing their OWCs usually narrates the OWC start-up experiences of the author(s), and without using the term, situates the director as a technology steward (Wenger et al., 2009) among other roles. This literature addresses OWC director concerns such as budget, staffing, tutor training, faculty training, website development, statistics tracking and reporting, technology choices, and consideration of all involved stakeholders (Ahrenhoerster & Brammer, 2002; Beebe & Bonevelle, 2000; Benson, 2014; Blythe, 1996; Brown, 2000; Colpo, Fullmer, & Lucas, 2000; Griggs, 2012; Harris, 2000; Healy, 1995; Martinez & Olsen, 2015; McKinney, 2009 & 2011; Miraglia & Norris, 2000; Moberg, 2010; Moe, 2001; Rickly, 1998; Salvo et al., 2009, Shadle, 2000; Weeks, 2000, and many others).

Administrators. The OWC design literature that mentions one or more concerns of institutional administrators includes issues such as funding, assessment, strong pushes for new technology, recruitment and retention, networking across and outside the institution, etc. (Beebe & Bonevelle, 2000; Cummins, 2000; Harris, 2000; Harris, 2010; Healy, 1995; Fels, 2008; Monroe, Rickly, Condon, & Butler, 2000; Rosalie, 2013; Wallace; 1998; Weeks, 2000). Most administrative OWC design considerations indirectly or directly connect to justification for the continued existence and funding of the OWC that in turn directly connects to the director's technological choices. Demonstrating that those choices are directly tied to student preference and usage, thereby contributing to recruitment and retention, solidly answers that need for justification.

Tutors. OWC literature that addresses tutoring training, of which there is plenty, does not qualify as OWC *design* literature unless some aspect of designing an OWC is its specific context. For example, much of the current OWC design literature addressing tutor concerns has discussed f2f tutors' preparation for online tutoring in OWCs created to be an extension of the onsite writing center, serving primarily onsite rather than online students (Anderson, 2002; Beebe & Bonevelle, 2000; Buck, 2008; Carlson & Apperson-Williams, 2000; Ericsson & McGee, 1997; Johanek & Rickly, 1995; Kastman-Breuch & Racine, 2002; Peguesse, 2013; Pemberton, 2004; Remington, 2006; Rickly, 1998; Shadle, 2000; Shea, 2011; Thomas, Hara, & DeVoss, 2000).

Students. OWC literature in general (including online writing instruction literature) addresses the tutoring of a wide variety of student groups—those with specific learning challenges like students with physical or learning disabilities or those still learning English. But for the purposes of this study, it is essential to note the disparity between current OWC design literature that considers the needs of two overall categories of students—residential (students

primarily enrolled in traditional onsite courses) and online (students enrolled in fully online degree programs). Nearly all current OWC design literature seems to have addressed the concerns of residential students, whether they are onsite, commuters, or taking classes on satellite campuses of the institution in question—or at least has been written from within the context of designing an OWC for such students. Some of this body of work specifically has addressed issues of accessibility, apprehension, and f2f versus online preference (Gardner, 1998; Hall & Wolf, 2003; Hoon & Emerson, 2002; Litman, 2007; Mabrito, 2000; Moe, 2000; Reno, 2010; Thomas et al., 2000; Van Waes et al., 2014; Wolfe & Griffin 2012; Yergeau et al., 2008). The other student category, online students, is woefully underrepresented, with only one out of the six studies I could find speaking specifically to fully online student concerns (Amicucci, 2011) and the other five addressing concerns of onsite students enrolled in online courses (Bell, 2009; Foreman, 2006; Kalteissen & Robinson, 2009; Shewmake & Lambert, 2000; and Thurber, 2000). Given the dearth of OWC design literature that addresses fully online student concerns, this study adds those voices to the ongoing conversation.

Faculty. OWC design literature that includes or focuses on faculty concerns is sparse as well, indicating a need for more research in this area. The few book chapters that have addressed faculty concerns have discussed educating them about the OWC or training them about how to promote it or collaborating with them to improve tutoring for specific assignments, etc. (Gardner, 1998; Harris, 2000; Kimbal, 1998; Rickly, 1998).

IT support. OWC design literature has generally mentioned technical support almost in passing rather than as a specific consideration to which significant attention should be paid. Most understand the foolhardiness of undertaking the design of an OWC without the full support of a decent information technology team—or at least one IT individual. However, the few that have

given specific attention to IT staff as specific stakeholders have mentioned their hand in hardware and software choices, programming (if needed), training on the new technology, ongoing tech maintenance (server upkeep), and ongoing tech support (Beebe & Bonevelle, 2000; Enders, 2001; Kearcher, 1998; Nelson & Wambeam, 1995; Rosalie, 2013; Selfe, 1995).

OWC Design Literature by Feature

In addition to categorization by stakeholders, OWC design literature may also be examined by the various features that comprise its makeup, from synchronous or asynchronous technology, to types of tutors, to accessibility and usability options. These features fall into one or more of three categories according to student motivation for OWC usage: convenience, connectedness, and academic progress (see Figure 2).

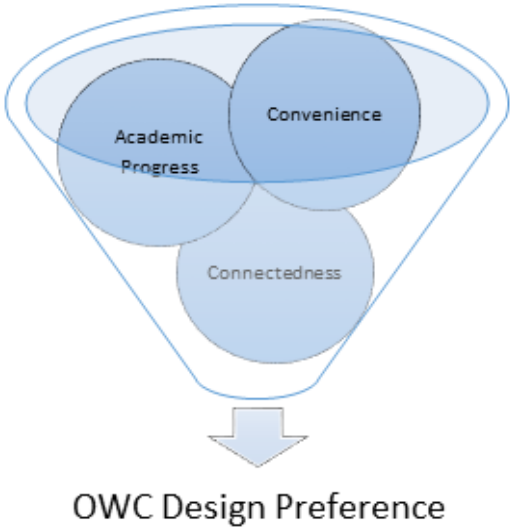

Figure 2. Conceptual framework for OWC design features.

The Convenience category includes those features of OWC design that students view as fitting (or not fitting) into their lifestyle and their approach to written projects: components that relate to speed, flexibility, accessibility, and ease of use. The Academic Progress category includes those features of OWC design that students may choose based on their ability to help students make

academic progress, whether they truly wish to learn and thereby improve their writings skills or wish to get their paper "fixed" in order to achieve a good grade or pass the class. The Connectedness category of OWC design refers to any features that students may choose or reject based on their ability to make the student feel more connected to the tutor and thereby the institution, components that may be viewed as enabling relationship and/or collaboration.

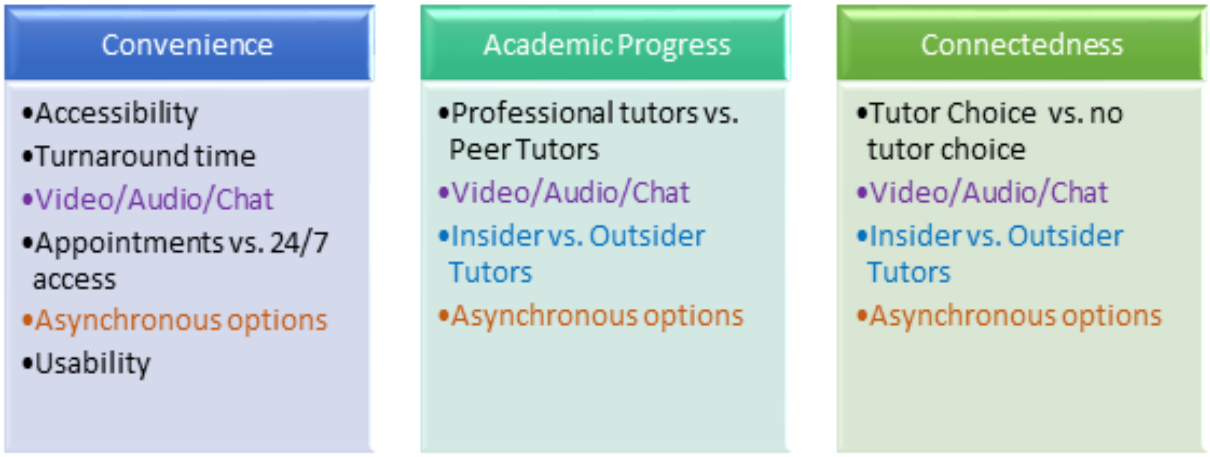

Figure 3. OWC design features by category.

Features affecting convenience. As Hewett (2015b) notes, fully online students' lives primarily revolve more around family and work responsibilities, and their schooling responsibilities must be squeezed into their often very busy schedules rather than schooling being the sole focus or one of only a few responsibilities as it is for most onsite students. Thus, convenience may be even more of a consideration for fully online students than it might be for onsite students or students in hybrid (partially onsite and partially online) courses and might even outweigh connectedness and academic progress assistance in their OWC design preference.

User friendliness. The ease and speed with which a student can locate, understand, and use the available services and resources within an OWCs interface may factor into how

convenient the OWC's design appears. And how a director conceives of a user-friendly interface may not mesh with online students' conceptions; the "user" in "user-friendly" implies construction with user preferences and conceptions in mind. As Kastman-Breuch (2005) reminds us, "Users always have conceptual models of how things work—whether or not we are conscious of these models," and "frustration may arise when our attempts to apply a conceptual model do not work" (p. 25). Blythe (1998) notes, "When users engage a technology, they look to it for clues as to its intended use. The way a technology is configured--e.g., the options available in its design--sends messages to users about what can and cannot be done with that technology" (p. 105). Thus, a wall of text might be more off-putting than limited text and colored buttons and images; conversely, not enough information about how the service and its features work may also be intimidating to those students for whom technology is a challenge.

Paper review turnaround. While most commercial tutoring services offer 24-hour turnaround for limited paper review, a few authors of OWC design literature do mention turnaround times for full paper review. Brown (2000) mentions a 24-hour turnaround time (p. 25), but the OWC encountered limited use—only 773 sessions in one school year (p. 26). My study's OWC averages 11,000 sessions in one year and maintains a turnaround time of 48 hours for shorter papers and 72 hours for longer papers. Monroe (1998) mentions a 48-hour turnaround time for full paper reviews (p. 4). Price et al. (2007) studied students in a particular online course and their preferences of f2f course-embedded tutoring over online course-embedded tutoring; they found students preferred quick feedback: "The speed with which queries and assignments are returned affects the perceptions of the quality of tutoring support" (17). Hence, though speed is not connected to the quality of tutor feedback and instruction, it affects students' perception of the overall quality of the tutoring service.

Scheduling vs. 24/7 access. Writing center listserv conversations reveal nearly all institutional online tutoring occurs via set appointments whereas commercial tutoring services can afford to hire enough tutors to cover 24/7 access and offer 'round the clock tutoring. Shewmake and Lambert (2000) mention set appointments, and Price et al. (2007) found in their study that students preferred set appointments with a specific start and end time; the authors speculated this preference was due to students' familiarity with f2f appointments. However, no one has studied whether students (particularly fully online students) prefer set appointments to constant access or vice versa, or perhaps see the two services as equally necessary, as they may employ different pedagogies and technologies.

Device accessibility. In this new age of personal and mobile technological devices, accessibility to an OWC across multiple devices may factor into perceived convenience for fully online students, depending on their familiarity and comfort with such devices, as well as their access to them. Rodrigo (2015) discusses "mobile devices—their prevalence in higher education, the ways in which they complicate OWI, and suggestions for ways to incorporate mobile learning into OWI" (p. 494) Roderigo's suggestions applicable to OWC design include advice to think about website construction for smaller screens, delivery through apps, and "alphabetic text delivery" in which "writing shorter, chunky paragraphs" might be a fitting goal (p. 500). Certainly, more commercial tutoring services offer accessibility through mobile device apps than do institutional tutoring services due to less funding and resources devoted to such technology. One participant in this study, a student with disabilities, demonstrated a need to consider funding multiple device accessibility for fully online students.

Features affecting connectedness. Building an ongoing relationship with their tutor or knowing their tutor has insider experience may impact fully online students' sense of

connectedness and their ability to collaborate with their tutor, thereby affecting their OWC design preferences. Tutor choice and tutor positionality are not the only features affecting students' sense of connectedness (see Figure 3), but asynchronous and synchronous technology will be discussed below under factors affecting all three OWC design categories.

Choice or no choice of tutor. Some home-grown OWCs, like Shewmake and Lambert's (2000), allow students to look at a tutor's schedule and choose that tutor or another tutor who fits their schedule (pp. 163-164). Many commercial tutoring services allow students to select a favorite tutor and return to that tutor every time they want assistance as long as that tutor is available. Students' ability to build a relationship with one specific tutor and experience a higher level of familiarity with that tutor may contribute to students' perceived feeling of connectedness and affect their level of engagement in the tutoring session. On the other hand, tutor selection may be unrelated to motivations of relationship and collaboration; students may be motivated to continually select one tutor who tends toward "fixing" their papers by providing revisions rather than other tutors who may diligently strive to educate and equip rather than proofread and edit.

Insider vs. outsider tutors. An insider tutor would be a tutor who has experienced or is currently experiencing the given institutional system of education as a student from within—essentially a peer tutor who understands the ins and outs of being a student in that fully online program of that particular school, how that institution's learning management system works, what a given degree program's or course's goals might be, and even how the institutional values and beliefs may influence assignment expectations. For instance, the study's site is a Christian university in which biblical worldview integration is a component of every course and many assignments, both in online and onsite classes. Thus, most (but not all) of the students enrolled are Christians, and all of the institutional online tutors are Christians. This is an instant bond that

most tutors and students share, regardless of any other differences, and such a bond may influence the tutors' approach and the Christian students' feeling of connectedness, thereby causing those students to prefer institutional help over commercial.

Nearly all OWC design literature refers to peer tutors or graduate tutors, meaning nearly all institutional OWCs employ insider tutors, and nearly all of them are located onsite rather than online across the nation whereas the opposite is generally true of commercial online tutoring services. Though no OWC design literature seems to emphasize insider over outsider tutors, Carlson and Apperson-Williams (2000) did find that new tutors who have tutored only online have an advantage over veteran f2f tutors who already favor f2f over online (p. 139). Thus, it is reasonable to assume that tutors who are also students within the given online program would possess an even greater advantage than those outside of it. Yet even this sense of connectedness may not outweigh factors of convenience and students' ability to select their tutor.

Features affecting academic progress. Different students may subconsciously or consciously view academic progress differently than others: some might view it simply as getting their papers fixed well enough to earn them a passing or higher grade while others may view it as assistance that will not only earn them a higher grade in the short term but will also equip them with the resources to improve their writing skills for the long term. Regardless of how they may define academic progress, certainly a reason for seeking the assistance of an online writing tutor would be to ensure they make such progress, whether they seek it on their own, are required by their professor, or merely follow some strong encouragement to seek help. Whatever the motivation, students might prefer a specific type of OWC design because of the specific kind of tutor or technology it employs.

Professional vs. peer tutors. Most commercial tutoring services (and a few institutional) claim to employ tutors with completed masters and doctoral degrees. In contrast, most institutional writing centers seem to employ peer tutors (Anderson, 2002; Beebe & Bonevelle, 2000; Buck, 2008; Carlson & Apperson-Williams, 2000; Ericsson & McGee, 1997; Johanek & Rickly, 1995; Kastman-Breuch & Racine, 2002; Peguesse, 2013; Pemberton, 2004; Remington, 2006; Rickly, 1998; Shadle, 2000; Shea, 2011; Thomas, Hara, & DeVoss, 2000). Only one OWC design article has somewhat addressed professional versus peer tutoring (Shea, 2011); nearly all other OWC design literature has directly mentioned or indirectly assumed employing peer tutors from within the given institution. Shea's (2011) study of faculty tutors versus peer tutors within an asynchronous OWC found faculty tutor comments were 64% mechanics-focused and 36% content-focused while peer tutor comments were 96% mechanics-focused and only 4% content-focused; however, peer tutor notes were more personal and relatable while faculty tutor comments were more formal. The former statistic might apply to perceptions of academic progress while the later observation might apply to perceptions of connectedness between students and commercial/professional tutors versus institutional/peer tutors. In the same study, all student participants (only three total) perceived that faculty tutors knew more about what their professors were looking for than peer tutors, but these students knew which tutors were faculty so that knowledge could have influenced their impressions (Shea, 2011). This perception of these three participants foreshadows similar perceptions within this study's survey results that indicate students prefer tutors with credentials in the fields of English or composition above any other type of tutor.

Insiders vs. outsider tutors. Since insider versus outsider tutors has already been discussed under connectedness, it will be discussed here only insofar as it relates to a student's

academic progress. An insider tutor who shares the students' values, beliefs, and experiences would most likely better understand and connect with those students' applications of their beliefs to their coursework and be able to guide them into appropriate integration of those beliefs into assignments that require it.

Features affecting all three categories. The possible asynchronous and synchronous technology options may significantly impact students' OWC design preference by influencing their perceptions of convenience, connectedness, and/or academic progress—any one or all three of them. For instance, a student may feel a full asynchronous paper review is more convenient than a synchronous session and contributes more to her academic progress by providing detailed written feedback and links to resources. Conversely, a different student might feel more connected through a synchronous option that allows him to see and hear his tutor as they share screens and discuss the paper; he might feel this option impacts his academic progress and level of convenience while he makes immediate changes to his own paper. What follows is a brief discussion of asynchronous and synchronous options and their possible influences on convenience, connectedness, and academic progress.

Asynchronous options. Hewett and Ehmann (2004) described asynchronous online writing instruction (OWI) as "a written dialogue that occurs over time" (p. 69), but since that time, technological advances have erased the word "written" so that asynchronous writing instruction is simply any dialogue (consisting of either written or audio exchanges or a combination of the two) that occurs over time rather than immediately. The most common asynchronous options include written reviews of student drafts, recorded audio (with or without visuals), and email tutoring.

Written reviews (partial vs. full) of student drafts generally consist of comments made with the commenting and/or track changes tool of a given word processing software. As Monroe (1998) advises, most paper reviews contain front comments, intertextual or embedded comments throughout the paper, and a concluding or summary comment (p.4). The written review of a draft allows students to submit or "drop off" their paper and receive permanent feedback to which they may refer as many times as needed, which addresses both convenience and academic progress. The area in which some students may view this option as lacking is connectedness. Students may not see collaboration as occurring when they describe assignment requirements and writing weaknesses; the tutor replies with explanations, suggestions, questions, examples, and resources; and the student then assimilates the response and chooses which revisions to make. Students may instead view this exchange as a one-time reception of feedback rather than a collaborative effort. If students' priorities include collaboration or experiencing a sense of connection with the tutor, a draft review may not be their first choice, but other asynchronous options may address connectedness a bit better.

Recorded audio feedback with or without a visual element is another asynchronous tutoring option some online writing centers have tried or still use by employing podcasting or recording software or using screen capture products like Jing or Camtasia. Though they were conducted in context of instructor feedback to students in onsite classrooms, some studies suggest student preference for audio feedback or audio and written feedback combined (Anson, 1997; Moore & Filling, 2012; Sipple, 2007; Sipple & Sommers, 2005, Sommers, 2012, 2013). These studies or theories allege that students feel audio feedback is more motivating, more bonding, and less judgmental than written feedback. In other words, hearing the tutor's voice may cause feelings of connectedness while hearing the tone and emphasis, and possibly seeing

the tutor's screen may positively impact learning by increasing understanding and motivation. Audio feedback may be more convenient as it plays on computers, tablets, and smartphones, and it encourages academic progress by repeated access; however, students may find it less convenient to locate a certain part of the audio feedback for replay than it would be to review written feedback.

Tutoring via email exchange is the oldest and still most popular asynchronous tutoring option in online writing centers (CCCC OWI Committee, 2011, p.25). Centers vary in approach from answering grammar, style, and formatting problems to reviewing excerpts of drafts to reviewing entire drafts via email. The most frequent criticism of the email option is again a lack of connectedness. Using his own email tutoring as a case study, Coogan (1995, 1999) insists that the right approach over weeks or even months can foster dialogue that builds a relationship between the student and the tutor. On the other hand, Kinkead (1987) notes some students prefer feeling disconnected; she says email tutoring may be better for shy students who are afraid to go through the writing center door (p. 340). Castner (2000) studied why only 12 out of 554 email consultations in her OWC resulted in dialogue, stating that a lack of dialogue "promotes the wrong idea about the goal of writing centers and the nature of the writing process itself," and portrays writing centers as "fix-it shops for writing, places where writing can be repaired in one session" (p. 120)—an argument also levied against asynchronous paper reviews. Castner (2000) found that students did not email questions about their tutor's responses for a variety of reasons, among the most popular of which was because it would take too long to get an answer, it was too inconvenient to do so, and they referenced other sources for help in answering their questions (pp. 121-122). However, Castner (2000) did not study whether learning and academic progress actually took place from these sessions despite the lack of dialogue; she concluded that email

tutoring should not be done or done only as a last resort if dialogue is not occurring (p. 127). Concerning academic progress, Carlson and Apperson-Williams (2000) argue that email tutoring places more responsibility on the student than f2f tutoring because it forces them to assess their own writing, to consider their weaknesses, and to review the assignment description (p. 135). On the whole, the literature's consensus about asynchronous online tutoring options seems to lean toward the greatest advantage in convenience (though tutees must wait for replies), some gain toward academic learning, and much less in collaboration or connectedness.

Synchronous options. Online tutoring that occurs in real-time or near real-time is said to be synchronous and deemed the closest simulation to f2f tutoring that online tutoring can achieve, though some synchronous options are plagued by issues of accessibility or hampered by technological functionality or the tutee's lack of technological skill. Synchronous options include audio sessions, audio/visual sessions, video conferencing, and chat (or instant messaging) sessions, affording convenience and academic progress for some and certainly more collaboration and connection than asynchronous tutoring.

The earliest type of synchronous online tutoring occurred via telephone with an emailed copy of the paper in front of both participants (Bell, 2000). Some centers still use this approach or use a cyber-calling platform like Skype to make free computer-to computer calls to tutor. Students may find discussing their papers over the phone convenient but may find it inconvenient to spend time during the conversation locating which portion of the paper they need to discuss or which portion the tutor wishes to discuss. Phone calls may encourage academic progress, as the student would be the one to make changes to the paper during the session. Connectedness and collaboration in a phone call may fall somewhere between asynchronous

tutoring and tutoring with a visual as well as audio component. Real-time response, tone of voice, and other verbal cues would help encourage connectedness, understanding, and learning.

Audio/visual synchronous tutoring sessions (not to be confused with video conferencing) essentially consist of an audio component along with some sort of visual feature—a whiteboard to which the draft can be uploaded or a screen sharing feature, such as WebEx web meeting applications or other such cyber platforms. Thurber (2000) observed tutoring sessions via Netmeeting and noted that students were more likely to take notes and more likely to find their own errors as long as the tutor allowed students to maintain control of their papers (p. 156); thus the tutor's approach via this medium, as with any other, may enable or prohibit academic progress and true learning. Wolfe & Griffin (2012) conducted a study of two types of synchronous audio/visual conferences in order to compare them to f2f conferences. Participating tutors were onsite graduate students and seasoned f2f tutors, and students were enrolled onsite, took onsite classes, and participated in f2f tutoring. The study was conducted right there in the writing center during normal business hours and found that a majority of students (87%) preferred the online conference or had no preference over f2f, but the study did not solicit the reasoning behind these preferences. Convenience may have not been a factor given the participants' f2f experience and the location of the study. The connectedness of this type of session falls slightly below that of a video conference since facial expressions are the only component missing from the scenario.

Video conferencing with screen sharing capability occurs via platforms like Skype or WebEx and is most like f2f tutoring since participants can see and hear each other as well as view the paper together and access web resources, assignment instructions, etc. Yergeau, Wozniak, & Vandenberg (2008) call it "synchronous audio-video-textual conferencing (AVT)"

and see it as a “semiotically rich medium that sustains critical 'social cues' and enhances interaction and exchange;” they “theorize and demonstrate the potential of synchronous digital exchange, including functions that surpass the affordances of paper-based f2f tutorials—such as real-time modeling and web-based referencing.” Shewmake and Lambert (2000) predicted video conferencing would be the future of OWLs (p. 169). In theory, video conferencing should be the synchronous option that results in the most effective academic progress if the tutoring session is conducted using best practices of f2f tutoring since it comes the closest to the collaborative level of a f2f session. However, since a video conference session requires an appointment, this study’s results show how convenience factors into students’ perception of this option’s helpfulness, making it more of a hindrance to learning than a help.

At least two of the most successful commercial tutoring companies use synchronous tutoring via a chat feature with whiteboard, which occurs in near real-time rather than in real-time like the other three synchronous options above. Much of Hewett’s online writing instruction advice for a synchronous approach is based on her experiences training Smarthinking online writing tutors on a chat system with whiteboard. Hewett’s 2006 study of chat with whiteboard interactions found that participants “were both idea-development focused and task oriented as opposed to socially oriented” (p. 4), meaning the tutors and students did not focus primarily on socializing but on the task at hand, yet they still collaborated effectively: two-thirds of revisions made could be linked to tutor-student interaction (p. 4). Shewmake and Lambert (2000) noted academic progress in their student participants, finding they were more focused and less distracted during online tutoring than f2f tutoring (p. 169). They also mentioned the value of recorded transcripts of the chat exchange as a contributing factor to student learning (Shewmake & Lambert, 2000, p.165). English (2000) observed that such an environment encourages

students' metacognition by providing opportunity for reflection as opposed to real-time conversation, which does not allow for much of a pause (p. 172). Melzer (2005) admitted that this venue makes it easy for the tutor to dominate if he or she is not careful, as frequent dialogue overlap can occur. However, if tutors use the venue appropriately, the approach can be collaborative, informal, and friendly—encouraging learning through communicating about writing problems in writing and in near real-time.

Conclusion

In this dual-perspective review of OWC design literature, I have demonstrated the lack of any focus on fully online students as unique stakeholders deserving to be studied and heard. I have also noted and described the various features affecting convenience, connectedness, and contribution to academic progress, which must be considered in designing an OWC. This conceptual framework of features intersects with online writing instruction scholarship, which addresses how writing should be taught via online classes and tutoring. Therefore online writing instruction (OWI) must be viewed as the final "feature" affecting students' growth in their writing skills. In the following section, I provide an overview of online writing instruction scholarship and connect its research, theories, and recommended practices to the questions my study has sought to address.

Online Writing Instruction

A review of current online writing instruction (OWI) literature provides an essential framework upon which to base the "academic progress" features outlined in the OWC Design section above. In contrast to much of the online tutoring literature, which primarily aims to provide alternative assistance for onsite centers and students, current OWI literature focuses instead on contexts in which students receive at least half or more of their writing instruction

online via hybrid or fully online writing courses (Hewett & DePew, 2015). Whereas online tutoring literature seems to emphasize moving face-to-face tutoring strategies into an online environment, OWI literature acknowledges that students learning to write in online environments require different approaches than those used in onsite writing tutoring and teaching, making OWI literature much more applicable to a study of fully online students. In this section of the literature review, I present an overview of OWI scholarship's evolution, current theory, typical students, current practice, recommended principles, and calls for future research.

Evolution of OWI

In her 2001 webtext, Beth Hewett defines *online writing instruction* to include "all educational uses of computer or Internet technologies for teaching or coaching writing." She explains, "Under OWI, I place computer-mediated communication (CMC) for classroom and writing/peer group situations, computer-based literary study, as well as individualized writing instruction such as that found in online writing lab (OWL) tutorials." Thus the current OWI literature has evolved from contributions of numerous theorists, researchers, onsite and online instructors, writing program and center administrators to the fields of composition and computer-mediated-communication (CMC) through published articles, collections, books, e-books, listservs, conference presentations, and committee work as they conducted studies or shared experiences anecdotally. As computers became universally accessible beginning in the late 1980s and software options expanded, so did publications and discussions about how such technological tools might be employed to teach and tutor writing in onsite centers and classrooms. Thus, OWI literature is rooted in CMC literature on topics such as wired composition classes (Barrett, 1993; Batson, 1993; Allen, 1996; Faigley, 1990; Hawisher & LeBlanc, 1992; Hawisher & Selfe, 1991; Yancey, 2003), theory and pedagogy (Alexander, 2006;

Blythe, 2003; Hart-Davidson & Krause, 2004; Hawisher & Selfe, 1999; LeBlanc, 1990; Thatcher, 2005), new technology writing assignments (Alexander, 2002; Cody, 2003; DePew & Miller 2005; Duffelmeyer, 2000; Hocks, 2003; Palmquist, 1993; Takayoshi & Huot, 2003), instructor training (Duffelmeyer, 2003; Hewett & Ehmann, 2004; Hewett & Powers, 2007), student preparation and literacy (Selber, 2004; Selfe, 1999), and student revisions (Hewett, 2000; Tuzi, 2004).

Also beginning with the computer boom in the late 80s and 90s, another contributing branch to OWI literature is online tutoring literature (as distinct from OWC design literature) on topics such as tutor training & pedagogical approaches (Ascuena & Kiernan, 2008; Castner, 2000; Kastman Breuch & Racine, 2000; Raign, 2013; Rein, 2009; Scrocco, 2012), technology concerns (Haas & Hayes, 1986; Johanek & Rickly, 1995), student revisions (Hewett, 2004; Sabatino, 2014), theories of tutor roles (Carlson & Apperson-Williams, 2000; Coogan, 1999; Harris & Pemberton, 2001; Hewett, 2006; Kastman-Breuch & Racine, 2000; Sabatino & Rafoth, 2012), and tutors' perceptions of sessions (Cooper, Bui, & Riker, 2005; Hewett, 2010; Rafoth, 2009; Rilling, 2005; Robertson, 2005).

Current OWI literature also, of necessity, grounds itself in the more general literature on e-learning (also known as online learning), which mostly appeared after distance education moved out of the correspondence course realm and onto computers and covers such topics as online course design (Blythe, 2001; Brickman, 2003; Harrington, Rickly & Day, 2000; Jafari et al., 2006; Miller-Cochran & Rodrigo, 2006; Twigg, 2003), instructor training (DePew et al., 2006; Driscoll & Carliner, 2005; Peterson, 2001; Yohon & Zimmerman, 2004), instructor perspectives (Boynton, 2002; Ford, 2002; Hailey et al., 2001; Hawisher & Selfe, 2003), building

community (Blair & Hoy, 2006; Davis & Ye-Ling, 1994; Tornow, 1997), and social/racial inequities (Brady, 2001; de Montes et al., 2002; Kynard, 2007).

In the same webtext in which she defines online writing instruction, Hewett (2001) noted that OWI was at that time "in a relatively early developmental stage, making this an ideal time to engage in research that will contribute to the development of our understanding of procedures and processes associated with OWI." Throughout the rest of the article she argues that "we need to take on a theory-generating stance designed specifically to answer practice-based questions about OWI," noting that "instead of empirical evidence, anecdote and untested theory often are provided to support or dismiss OWI." She concludes with this suggestion: "Research methods that empirically examine data might include textual analyses via linguistic, rhetorical, social, or other taxonomies. Methods that contextualize the data might include surveys, interviews, and observations." While a whole host of online writing-related literature followed, nothing as comprehensive was published as Hewett & Ehmann's 2004 book, in which both authors took Hewett's own 2001 advice, generating theory and practice based on studies of the previous literature but also on their experiences in helping "build the foundations of one of the largest online writing programs nationally and abroad at Smarthinking, Inc., a leading online learning center for secondary and postsecondary learners" (xiii). With the advent of this 2004 book, Hewett became the most prominent and prolific writer and theorist in the field of OWI. Thus, while acknowledging that all her theorizing and research is grounded in the abovementioned seminal discussions of what later became OWI, this study is specifically framed by Hewett's recent solo publications, her writing in collaboration with other authors, and her work in conjunction with the CCCC's Committee on Best Practices for Online Writing Instruction

(CCCC OWI Committee). This body of work is the most useful and relevant as the most current and authoritative on OWI to date.

Current OWI Overview

In her 2001 webtext, Hewett cautions against comparing OWI with face-to-face instruction or tutoring: "Comparison as an investigative method loses its value when, upon finding differences, people see them as deficits rather than as an opportunity for deeper practice-based exploration. Such comparisons may contribute to a tendency to try to fit OWI into the mold of f2f writing instruction, where differences seem to be interpreted as OWI not doing what it is 'supposed' to do." Speaking about Cooper, Bui, & Riker's (2000) opinion of online tutoring, Hewett writes,

> . . . they fail to challenge whether the principles of f2f tutoring that *cannot be replicated* in this new environment even *should be replicated* in it. Is the purpose of OWI, by way of tutorial or other pedagogy, to replace the f2f teaching interaction? Is there room in student-centered learning assistance for both types of teaching interactions? To address such questions, we need practice-based driven research that explores the distinctive natures of these media.

Over the years following this statement, Hewett and collaborators have sought to answer these questions through conducting such research—specifically avoiding comparisons with face-to-face instruction in any way that views OWI as the deficient model to onsite instruction. The goal was and is to establish OWI theory and practice in its own right, apart from or in conjunction with face-to-face instruction.

The theory in which OWI is grounded, the participants in OWI (administration, instructors/tutors, and students), the technology used for OWI, and the pedagogical approaches

to OWI comprise the majority of OWI literature. For this study, the participant focus was on students' reported experiences rather than administrator concerns or instructor/tutor training, though the following overview *will* include recommended OWI pedagogy, a factor closely tied to OWI technology and students' academic progress using that technology. Thus, this scholarship is foundational to this study's focus on fully online students' perceptions of online writing support.

OWI theory. Hewett (2001) describes the eclectic nature of OWI theory: "Writing programs, writing centers, and OWI through computer-mediated classrooms and OWLs ground their practices fluidly and eclectically in more than one theory." She goes on to observe, "Even practitioners and institutions whose stated guiding principles may point to a particular philosophical construct often develop an eclectic approach to meeting the writer at the point of his/her need by attending to audience and purpose, the social nature of the writing act, and correctness issues" (2001). In support of these observations, Hewett connects the various theories of composition to oft-used OWI strategies, demonstrating how instructors/tutors effectively use some aspects of each theory as well as pointing out how other facets of these same theories may be detrimental if applied to OWI.

Hewett (2001, 2015b) points out that OWI strategies often pull from theories going as far back as the Current-Traditional and Neoclassical approaches to the Process, Expressivist, and ever-popular Social Constructivist theories. When OWI points out sentence-level problems and provide handouts that afford out-of-context grammar instruction and practice, they engage in a Current-Traditional approach, and when focused on more rhetorical aspects of papers, such as audience, purpose or clarity of logic in building arguments, OWI pulls from Neoclassical theories (Hewett, 2001). When promoting drafting and revision, OWI of course draws upon process theory (Hewett, 2015b, p. 89). OWI instructors/tutors who emphasize student ownership

of the draft and seek to avoid directive comments in favor of asking probing questions privilege the Expressivist approach (Hewett, 2001). However, based on experience and research, Hewett (2015b) feels that encouraging ownership and avoiding appropriation at the expense of student learning is particularly harmful to OWI: "My experience is that OWI instructors need to intervene more directly to be effective. Without careful but explicit and direct instruction, online instructors essentially are handicapped in the ways they can respond that will prove helpful" (p. 84). Regarding social construction, which privileges the collective thoughts of the group over that of the individual, Hewett and Ehmann (2004) acknowledge,

> Philosophically, OWI and its attendant instructional methods are a natural outgrowth of, and commitment to, the social constructivist epistemology, which anticipates that writing development can emerge from frequent sharing of student texts and discussions about those texts. The innovative factor is that OWI instructional settings engage the social element textually (and, increasingly, graphically), rather than orally (p. 41).

Yet with subsequent strides made in video conferencing technology, the oral component has become more of a factor, particularly in synchronous components of online writing centers. However, social construction also privileges mutual or group authority over instructor/tutor authority, which again, Hewett (2015b) views as problematic for OWI. "There is an attempted leveling of instructional hierarchy that is intended to strip from teachers any pretense at authority, yet that authority is always obvious in their duty to evaluate and grade student writing," she notes (p. 88). "For online tutors, a different authority—that of having specialized knowledge about writing—is difficult to hide, but some attempt to do so anyway in order to link contemporary practice with theory" (Hewett, 2015b, p. 88).

Therefore, Hewett acknowledges the important contributions each of these theories makes toward OWI practice, yet she maintains that attempting to fully adopt certain aspects of them has often proven detrimental to student learning in online writing courses and tutorials. She thus concludes, “Online writing instructors need to be eclectic: they need to use any and all effective strategies from any and all epistemologies” (Hewett, 2015b, p. 89). She exhorts OWI instructors to examine composition theories “to which they are most drawn and add strategies that complement them,” noting that taking this “eclectic approach” can “free the instructional voice and empower it to do the work students want and need” (Hewett, 2015b, pp. 89-90). So Hewett moved full circle from her 2001 criticism of OWI’s piecemeal approach due to lack of its own theory to her 2015 approval of this approach with the caveat that the pieces be carefully selected, avoiding those aspects that undermine the effectiveness of OWI and result in less quality student revisions and less growth as writers. As participants in my study revealed their preferences for online writing center designs, they also revealed preferences for certain pedagogical approaches grounded in one or more of these theories as delivered through a specific technology that seemed most effective to them.

OWI students. The students who participate in OWI, whether through online writing courses, hybrid writing courses, or online writing tutorials, represent a wide range of experiences related to their technological skills as well as their literacy and writing skills. Though their highly varied backgrounds mean that there is no typical description of one OWI participant, Hewett (2015b) recognized that each type of OWI attracts a particular type of participant more often. She created a vignette of a typical student who might participate in each type of possible online writing instruction: hybrid learning, fully online learning, online tutoring, and online feedback or grading in an on-campus course (pp. 12-15). Her description of a typical fully online student

paints a picture of a working mother with two young children who works on her courses after the babies are asleep. All her communication with classmates and her instructor occur through email, chat software, the course discussion board, and written assignments, and she only knows who they are from their biographies, photos, and posts (Hewett, 2015b, pp. 12-13). Hence, typical fully online students are generally older than the 18-21 year-olds who frequently fill onsite classes, and fully online students often face unique pressures due to life circumstances or lack of technological skills.

However, Hewett (2015c) makes it clear that we should not presume older students are less technologically savvy or that younger students are more so (pp. 24-40). She asserts that OWI students should all generally be viewed as nontraditional students since most educators have an extremely narrow view of typical college students. “By considering all of these students as nontraditional because of their experiences with digital technology, we gain a different lens through which to understand the literacy needs they have in OWI” (Hewett, 2015c, p. 24). Thus, she takes time to thoroughly describe first the younger nontraditional OWI students and then the older nontraditional OWI students, noting how their experiences may have affected their relationship to digital technology (Hewett, 2015c, p. 25-39).

Hewett (2015c) identifies the younger nontraditional students as those who enter college within a few years of finishing high school and most likely have grown up with digital technology, though some may not have, depending on socioeconomic background (p. 25). She notes younger nontraditional students’ digital preferences may not match their backgrounds: some who grew up with digital access may dislike using it or seem to learn it slowly and others who may not have grown up with it may learn fast and truly enjoy using it (p. 25). In other words, we cannot assume digital knowledge and/or preference based on youth. Hewett does

advise, however, that “one trait we can count on is that our younger students likely have had little to no experience with educational computing that transfers naturally to OWI;” they might struggle with both “the relative slowness” of required interactions like discussion board posts and peer groups “while they grapple with learning to write academic prose through a system that requires them to read academic prose and instructions, interpret them, and apply them to their own writing” (p. 26). Further, according to Hewett, the young non-traditional student is used to communication at a fast pace via a barrage of images, text, and sound and can see these snippets as far more relevant and meaningful than reading a book; thus, they tend to have a “shallow relationship with textual literacy” (p. 28). Finally, young nontraditional students are generally “also digital multitaskers, used to jumping back and forth from one focus to another and have grown up viewing this approach as more efficient than focusing on one thing at a time (Hewett, 2015c, pp. 30-31). Certainly not all young nontraditional OWI students fit all of these descriptions perfectly, but these tendencies may influence their technological and pedagogical preferences for certain OWC designs.

The same may also be said of the older nontraditional OWI students whom Hewett (2015c) describes as having wide range of digital skills from virtually none (not even word processing) to as many as the younger students (p. 33). She notes that even if the older nontraditional student is skilled with technology, the difference is that “most adults can remember a time without the technology and they likely have a sense of what they have gained and lost through it” (p. 33). Due to their current life circumstances, these older students tend to value convenience and speed (p. 34); they have seen the value of writing skills in the workplace, and therefore, most are more eager to improve than younger students. They also see an increasing need to learn technology for marketability (p. 35) but many still fear learning a

technology that is new to them (p. 36). Given such a wide variety of skills and attitudes related to digital learning, it becomes imperative then to discover what technology and accompanying pedagogy these younger and older nontraditional students feel helps them learn the most so that institutions may provide writing support that best suits the majority of the students they serve.

OWI practice. OWI literature divides its suggestions for best practices into those that are approached asynchronously (in non-real time) and synchronously (in real time). Hewett (2015b) notes, "Asynchronous and synchronous modalities differ "in regard to temporality, connectivity, and uses of speech and text" in addition to "interactivity, which is the degree of interpersonal interaction one might expect from each" (p. 41); thus, it might be said that in OWI the technology determines the pedagogy. However, Warnock (2009) exhorts OWI instructors first to decide what it is they want to be able to do (the "pedagogical need"), and then to determine what technology to use based on its accessibility to and the training necessary for both the instructor and the students (p. 19-20). This advice is in keeping with the idea of a technology steward who first determines what best suits the community she serves (Wenger et al., 2009). Therefore, each section below will address the possible asynchronous and synchronous technologies, their benefits and pitfalls, and recommended best practices, many of which tie in to the aforementioned eclectic theory of OWI and provide the foundation for many of the questions I asked of participants in my study.

Asynchronous technology and OWI. Hewett and Ehmann (2004) describe asynchronous OWI as "a written dialogue that occurs over time" (p. 69). The process involves instructors who "'speak' by writing end commentary or by embedding comments in the student's [work] and by modeling strong writing;" students then "'reply' by developing or changing their own writing in response to the consultant's suggestions, by choosing not to make changes, by imitating the

modeled writing, and by resubmitting a piece of writing" (p. 69). So in asynchronous OWI, the students submit questions, comments, ideas, and/or drafts in writing, and the instructor replies with comments—most often in writing, but in recent times though less often, with audio or audiovisual feedback. Then the students choose which suggested changes they will make or ignore, hopefully learning in the process. Starn (2015) notes, "Both teachers and students need to learn to use the technology for activities that they previously have experienced as synchronous, oral, and aural. Thus, [in asynchronous OWI] writing becomes a way of speaking and reading a way of listening" (p. 96). Instructors and students must become familiar and comfortable with their roles in using asynchronous technology, learning to communicate clearly and effectively as well as interpret meaning accurately. But before such adapting can occur, OWI instructors and directors of online writing centers must select the most effective asynchronous technology for the students they serve.

Technological tools used for asynchronous OWI include macros, commenting tools, formatting tools (cap lock, highlighting, text color, track changes, etc.), speech to text tools, podcasting, video and screen capture tools, and tablets that allow handwriting on documents (Warnock, 2009, pp. 126-130). Email and learning management systems most often provide the platform for exchanging these written or recorded submissions and replies. Mick & Middlebrook (2015) note other more recently employed technological tools used for asynchronous OWI, which include "discussion boards, blogs, Wikis, social networking sites, e-lists, and streaming audio or video" (p.130). Still, each of these tools require non-real time communication in which each part of the dialogue exchange, whether written, audio, or audiovisual, occurs apart from each other and over time rather than immediately, an approach that has specific challenges but also valuable benefits.

The asynchronous approach to OWI has been the subject of much criticism and deemed by some as a deficient modality due to its perceived lack of interactivity, and thus its perceived failure to encourage collaboration in line with the social constructivist theories now grounding the majority of practices in onsite centers and composition courses (Coogan, 1999; Cooper, Bui, and Riker, 2000; Enders, 2001; Harris and Pemberton, 1995; Thomas, DeVoss, and Hara, 1998). However, though they agree that this criticism may be a pitfall in some instances of asynchronous OWI, Monroe (1998) and Hewett (2002) both assert that OWI is simply collaborative in its own unique ways, ways that may be more suitable to OWI students than to onsite students. Hewett (2002) observes, for instance, that collaboration occurs in an asynchronous tutorial when "the tutorial forces the student to set the agenda in writing and later to read the consultant's writing, applying it (or not) to his/her essay" (p.7). She notes, "Even the choice not to use a consultant's suggestions implies that the collaborative process is working on the student, as choice comes from knowledge gained through collaboration with the consultant as writing informant" (Hewett, 2002, p. 7). According to Hewett, however, the less-collaborative nature of asynchronous OWI also has specific benefits for student writing and revision: she notes that a student in synchronous or face-to-face conference with a tutor "may intuit a personalized reaction to his writing, and a student who conferences with his professor may simply desire to please the professor in order to gain her approval" (p. 7). Thus Hewett feels that benefits of asynchronous OWI include removing the personal, which gives "the response a more impartial and objective view that may be more palatable" and allow more time for a student to "make decisions about her writing without the pressure of an immediate audience" (pp. 7-8).

Mick and Middlebrook (2015) concur, listing similar advantages and the one similar but significant pitfall of asynchronous OWI:

> Among the frequently identified advantages of using asynchronous technology in OWI are (a) higher levels of temporal flexibility, (b) increased cognitive participation because of the time allowance for amplified reflection, (c) higher potential to use the increased allowable time for processing information, (d) multiple opportunities to write and read, and (e) the existence of an archival record for transactions conducted in the environment. Yet, asynchronous platforms lack immediacy and thus may contribute to a sense of participant isolation, or what the online education literature would call loss of social presence. (pp. 130-31)

Thus, OWI students learning asynchronously have time to process and apply what they learn, are learning to write primarily through reading and writing, and have records of their exchanges to which they can return as needed; yet they may lose a crucial sense of connectedness. This loss, however, may be mitigated by other synchronous options provided by the instructor or the writing center.

In addition to these general gains and losses, each asynchronous technology also has its own advantages and disadvantages. For instance, Warnock (2009) warns instructors that, though macros containing lists of comments allow for more detailed responses in less time, they "could slip into a boring, mechanical routine; students most likely would sniff out the inauthentic nature of [their] comments, which might disrupt [their] ability to help [students] improve their writing. The whole process could begin to feel like an assembly line" (p. 126). Hewett (2015b) notes the pros and cons of recorded verbal feedback on an essay. Students might feel more personally connected but may experience long download times or may not remember much of the instruction without having to play the file multiple times. Instructors may give too much information or too many corrections in audio feedback; and when grading revisions, instructors

might need to re-listen to every file in order to recall what advice they gave each student (p.42). She argues, “The point is that neither the medium of voice nor that of text is better or worse . . . They are merely different” (p.42). She goes on to advise, “When faced with the choice about which to use . . . Decide based on the qualities and strengths of the available modality and platform, students' apparent (and hidden) learning styles, and what needs to be accomplished” (p. 42).

The pedagogies Hewett and Ehmann (2004) and Hewett (2015b, 2015c) recommend for asynchronous OWI, particularly for written OWI, support Hewett’s 2002 assertion that asynchronous instruction can be effective in a unique way that is just as or more suitable for OWI students than strategies that attempt to force traditional classroom strategies into the online environment. In essence, Hewett (2015c) advocates an OWI approach that privileges higher order concerns—HOCs (content and organization) over lower order concerns—LOCs (style and grammar)—though both should be addressed (p. 191). She also recommends an approach that uses a “problem-centered, linguistically direct instructional style . . . that teaches students what a problem is, why it is a problem, and how to fix it or avoid it while clearly telling students what they should do through a series of next steps” (p. 191). Hewett & Ehmann (2004) provide six steps for effective asynchronous OWI, and based upon her subsequent research, Hewett (2015b) further elaborates upon two of those steps.

The six steps Hewett & Ehmann (2004) recommend for asynchronous OWI are (a) evaluate the essay's purpose, (b) review the writer's previous submissions, (c) read the entire essay before commenting, (d) consider the student's requests for help, (e) construct a global response, and (f) embed comments throughout the student's document (pp. 76-85). Within step five, the authors advise that the global response should include the essay’s strengths, HOCs,

LOCs, and next steps; for HOCs the instructor should “respond as an interested reader, relate comments to the assignment, ask probing questions,” ask for elaboration, use direct language, and suggest additional research, while LOC strategies should include identifying error patterns, modeling corrections and revisions, suggesting helpful references, resisting the urge to over-comment, and using formatting tools strategically (Hewett & Ehmann, 2004, pp. 79-85). Hewett (2015b) adds that asynchronous responses should include a personal greeting, frequent use of student’s name, and cues of attentiveness, interest, and encouragement (pp.132-134).

For the sixth step of commenting throughout and within a student’s essay, Hewett (2015b) strongly advocates for a direct approach based on the results of several studies she conducted—a review of 200 asynchronous and synchronous online “teaching interactions” and multiple student/instructor questionnaires (pp. 116-129). Her study results indicated that “direct speech” acts are significantly more effective for OWI; thus “explanations, assertions, commands, and questions” result in accurate revision more often than suggestions (p. 117). She refers to clear and direct instructional language as “semantic integrity,” noting that it “demonstrates respect for students' intellectual capabilities” and “provides sufficient information to students, offers clear guidance about potential next steps,” and “works to prompt new or different thinking--all through textual commentary” (p. 4).

Upon a review of all these asynchronous pedagogical strategies, we can see the eclectic nature of the theory in which they are grounded, pulling from current-traditional, process, expressivist, and even a bit of social constructivist theory where possible. Therefore, adopting strategies such as these, some developed specifically for OWI and some of which contradict face-to-face lore about avoiding directivity, has been shown to be more successful in fostering

online student writing revision and improvement. My study reveals that students do perceive effective strategies such as these occurring through asynchronous options.

Synchronous technology and OWI. Mick and Middlebrook (2015) state that the synchronous OWI approach involves "media relative to meeting concurrently through text and voice (i.e., live chat), live document sharing, live audio or video conferencing (both one-to-one and one-to-group), meetings in virtual worlds, and white board sharing" (p. 131). Warnock (2009) adds the telephone to the list. Hewett & Ehmann's (2004) book bases recommended synchronous OWI pedagogy on near-real time text-based chat coupled with shared whiteboard technology as used in the online tutoring program they developed for Smarthinking; they assert that "grounding in one particular [synchronous] platform will help instructors to practice online instructional techniques and then export their knowledge to other platforms" (p. 117). Regardless of the chosen synchronous technology, the idea behind synchronous OWI is that it occurs in real time or near-real time, coming as close to real conversation and collaboration as is possible in an online context.

As with asynchronous technology, synchronous technology has both benefits and pitfalls. The benefits of synchronous approaches lie mostly within their connectedness to students and their creation of social presence:

> Synchronous media's primary advantage typically is identified as interpersonal rather than cognitive, ostensibly owing to participants' feelings of intimacy and real-time engagement, which tend to be associated with student satisfaction, student learning, and lower rates of attrition. Such synchronous interactions can help to avoid miscommunications and to address problems when miscommunication has occurred (Mick & Middlebrook, 2015, p. 131).

Despite such seemingly positive aspects of synchronous OWI, other aspects may mitigate those advantages. For instance, depending on the choice of technology, the majority of an online conference might be dedicated to helping the student figure out how to use the technology for effective communication. Further, Mick and Middlebrook (2015) note that many synchronous platforms lack permanence because either they cannot be recorded or the recorded file is too big to be stored (p. 142). If they *can* be recorded and stored, students often must take significant time to locate a particular part of the conversation. Mick and Middlebrook also note that text-based chats are often problematic in regard to pace, as participants may think and type at differing speed, and once out of synch, the chat can result in confusing and convoluted conversation (p. 143). Thus two of the keys to successful synchronous OWI lie in selecting user friendly and easily accessible technology and finding ways to document synchronous sessions, despite lack of recording and/or storing capabilities. However, effective pedagogical strategies for synchronous OWI are equally crucial to a beneficial session.

In considering the synchronous OWI approach, Hewett and Ehmann (2004) state that "the online instructor's job is to respond to the student at the point of stated or discernible need and to provide instruction focused on that need" (pp. 117). Thus, unlike asynchronous OWI, synchronous OWI should be more focused on the student's stated need(s). According to Hewett and Ehmann, synchronous OWI should always include the following four or five "phases": (a) Student asks a question or poses a problem, (b) Instructor (tutor) assesses the question or problem, (c) Student "engages in dialogue and written problem solving" with instructor, (d) Instructor concludes conference with "next steps," and (e) One or both participants save a record of the interaction if possible (pp. 117-118). The authors elaborate on the engagement or third phase of synchronous OWI, recommending that instructors determine whether student needs help

with HOCs or LOCs; ask questions about student's concerns and encourage him or her to set agenda; actively participate even in silences by making listening noises or comments (hmmm, or I see); work with the student's ideas, outlines, or sentences as well as relevant examples; and be creative and flexible, adapting the teaching to the situation or preparedness level of the student (Hewett & Ehmann, 2004, pp. 121-123). In essence, good synchronous OWI should focus on very specific student-raised issues approached in a collaborative and problem-solving manner, leaving the student with one or more next steps to take.

As students in this study considered which technological options they prefer in an OWC design, they judged usability, usefulness of pedagogy, ease of communication and application of feedback, feelings of connectedness, and all the other aspects of synchronous and asynchronous OWI. Mick and Middlebrook (2015) observe, “The emerging consensus regarding the choice of asynchronous and synchronous modes is that neither is inherently better, but that they complement one another and should be employed after considering the instructional and rhetorical situation” (p. 137). The authors note that students with different backgrounds and types of learning issues might meet more success with asynchronous rather than synchronous or vice versa (Mick and Middlebrook, 2015). Thus, offering both asynchronous and synchronous writing assistance options and perhaps even more than one synchronous option would best meet the wide variety of needs among OWI students.

CCCC OWI Committee Charge & Findings

In concert with the current OWI literature, the College Composition and Communication Conference’s Committee on Best Practices was charged in 2007 and again in 2010 with several tasks, the primary of which was to “identify and examine best strategies for online writing instruction using various online media and pedagogies primarily used for the teaching of writing

in blended, hybrid, and distance-based writing classrooms, specifically composition classrooms, but including other college writing courses" (Hewett, 2015a, p. 6) This committee was composed of a variety of "OWI educators and scholars: those who work for traditional and for-profit four-year and two-year postsecondary institutions; part- and full-time composition educators; administrators and other stakeholders; specialists in multilingual writers, disabilities-based OWI, and other learning needs/preferences; and online tutors and administrators" (Hewett, 2015a, p. 5). Six years of committee-conducted research and studies resulted in a CCCC position statement (CCCC OWI Committee, 2013) comprised of 15 principles the committee believes may lead to effective practices in OWI. Four of these principles are particularly applicable to online writing centers and should be considered by directors selecting technology and approaches for OWC design or redesign.

OWI principle 1. Principle 1 states, "Online writing instruction should be universally inclusive and accessible" (CCCC OWI Committee, 2013). In its research and conducted studies, the committee found that, too often, those selecting OWI technologies and approaches neglected to consider how accessible and effective they might be for students with any sort of disability or learning disadvantage; thus the committee concluded that "no statement of OWI principles and practices can be appropriate if it does not fully recognize and accommodate educators and students with varying physical, learning, linguistic, and socioeconomic challenges" (Hewett, 2015a, pp. 38-39). One participant in my study did turn out to have a cognitive disability, which helped shed some light on which writing assistance designs may best serve students with her unique challenges.

OWI principle 2. Principle 2 states, "An online writing course should focus on writing and not on technology orientation or teaching students how to use learning and other

technologies" (CCCC OWI Committee, 2013). This principle clearly speaks for itself. The committee noticed many instances in which instructors were being pushed to use more and newer technology in their courses by those above them who were not stopping to consider the nature of teaching writing; thus, Principle 2 addresses the fact that the writing needs should drive technology choices rather than vice versa (Hewett, 2015a, p. 48). Further, technology choices should be made based on usability and student and instructor preparedness: "It must be clear that OWI teachers and students alike do not need to be technology experts, computer programmers, or Web designers to accomplish the instructional purposes of an [online writing course or tutorial]" (Hewett, 2015a, pp. 45-46).

OWI principle 3. Principle 3 states, "Appropriate composition teaching/learning strategies should be developed for the unique features of the online instructional environment" (CCCC OWI Committee, 2013). As already discussed in the OWI theory portion of this chapter, this principle points to the eclectic nature of the theory most often used to ground most OWI and the frequency with which instructors and online writing centers attempt to migrate face-to-face writing instruction practices to the online environment without considering whether another way might be more effective. Hewett (2015a) observes that such consideration might allow OWI educators to "move beyond old perceptions that online instruction is naturally inferior to onsite instruction, which can open the field to a better understanding of how people learn to read and write in a digital age and in technologically enhanced settings" (p. 51). She lists seven questions that an OWI theory should address, including this: "Given the media of text, audio, and audio/video, what are the effects of such mediation on writing instruction and learning if in any way at all?" (p. 51). My study encouraged fully online students to answer this question based on their own perceptions and experiences.

OWI principle 4. Principle 4 states, "Appropriate onsite composition theories, pedagogies, and strategies should be migrated and adapted to the online instructional environment" (2013). Despite Principle 4's apparent conflict with Principle 3, the OWI Committee recognizes that some approaches used to teach writing in traditional classrooms truly are appropriate for OWI as well—not everything has to change (Hewett, 2015a, p. 52). Including sentence-level instruction, encouraging drafting and revision, focusing on audience and purpose, and employing other approaches used in onsite classrooms generally transfer quite well to OWI and should be migrated.

OWI principle 13. Principle 13 states, "OWI students should be provided support components through online/digital media as a primary resource; they should have access to onsite support components as a secondary set of resources" (CCCC OWI Committee, 2013). Essentially, this principle requires that any form of support (orientation, training, writing support and research assistance) be offered to students online, in the modality to which they are accustomed, with onsite resources as a second option (Martinez & Olsen, 2015, p. 190). Martinez and Olsen (2015) assert, "This guideline suggests that students who meet asynchronously through the LMS should have asynchronous tutoring available, while students who meet synchronously should have synchronous tutoring available. When possible, having both modalities available is helpful to learners with varied preferences and access needs" (p. 190). Thus, Principle 13 charges designers and directors of OWCs for fully online students to provide writing assistance in the primary modality through which the online program is delivered, supplementing that assistance with secondary online modalities and onsite resources—thereby ensuring the greatest technological accessibility, familiarity, and inclusivity for their body of online students. Given Principle 13 and the fact that this study's context is primarily an

asynchronous online program, its students' preferences should and did align more prominently on the side of asynchronous tutoring, yet the inclusion of the synchronous commercial tutoring option along with the institution's synchronous option yielded further data about the helpfulness of such writing support.

Recommended OWI Research

In the penultimate chapter of the committee members' collaborative book, Ehmann and Hewett (2015) sound the call for more research into OWI, citing the committee's 2011 report, which states that advancements in OWI and OWCs should be rooted in "valid and reliable research findings and systematic information dissemination" (p. 31). The authors urge those engaged in all aspects of OWI to engage in active and purposeful research:

> Given existing questions about participant experiences and OWI processes, therefore, a primary need is to explore the phenomenon of OWI—with individual cases across various institutions and learning contexts being viewed as opportunities to investigate overall trends and patterns that can lead to a deeper understanding of OWI as a phenomenon in and of itself. (Ehmann & Hewett, 2015, p. 526)

The rest of the chapter outlines possible research questions and methodologies for studying OWI process, interactions, and outcomes, but most relevant to this study, the authors strongly recommend research into stakeholder perceptions and experiences with OWI and online writing centers:

> Students are primary stakeholders in the OWI endeavor. As such, their firsthand experiences warrant exploration in addition to their reasons for engaging in OWI and their views about its purpose and value in the postsecondary context. A priority of this approach is to seek descriptive responses that are rooted in respondents' actual

> experiences rather than evaluative responses about what OWI should or should not be. . .. The student experience helps to triangulate what researchers see in the many texts that OWI makes archivally available. (Ehmann & Hewett, 2015, p. 533)

Thus, this study heeds this call for further research and adds the voices of fully online student to the body of OWI literature, confirming its current practices.

Chapter Summary

In this chapter, I have reviewed OWC design literature from dual perspectives, noting the stakeholders addressed and neglected as well as the three main categories into which its features fall: convenience, connectedness, and contribution to academic progress. Participants in my study shared their perceptions of and experiences with these features as they responded to questions grounded in this conceptual framework of OWC design. In this chapter, I have also summarized the body of current OWI scholarship, including its theories and recommended practices and principles. This summary of OWI literature grounded portions of my study aimed at soliciting perceptions of tutor pedagogy that either helped or hindered participants' growth as writers. In the next chapter, I describe in detail my data collection and analysis methodology for this study, which fills a gap in the OWC design literature and provides further insights for online writing instructors and tutors.

CHAPTER THREE

METHODOLOGY

My purpose for this study was to give fully online students a place as stakeholders in OWC design literature and a way to confirm or complicate online writing instruction theories, practices and principles by describing their experiences with different versions of online writing support. Thus, this multiple-site, embedded case study of fully online student users within the online program of a private university sought to answer the following research questions:

1. Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers?
2. What are the reasons for these perceptions?

In this chapter, I explain how I explored these research questions from several angles in order to draw meaningful conclusions from the data and form a clear picture of students' experiences with these OWC designs. I begin by describing my case study methodology based on a combination of Merriam's (1998, 2009) and Yin's (2002, 2006, 2009) approaches. I then describe in detail the research contexts, my participant selection process, my data sources, and my methods of data collection and analysis. I conclude by addressing steps taken to ensure the study's validity, reliability, and ethicality.

Case Study Research

Studies related to writing centers' actual or perceived effectiveness are strikingly diverse in methodology. In particular, researchers of online tutoring have conducted studies by observing, recording, transcribing and analyzing sessions (Blau & Hall, 2002; Wolfe & Griffin, 2012;); by collecting and analyzing anecdotal evidence (Foreman, 2006; Inman & Sewell, 2000); by analyzing drafts, tutor reports, or websites (Carpenter, 2007; Cogie, 2006; Peguesse, 2013);

by analyzing students grades (Calfee, 2007); or by conducting surveys alone (Johanek & Rickly, 1995; Morrison & Nadeau, 2003) or surveys paired with interview data (Brizee et al., 2012; Price et al., 2007; Weaver, 2006). Though none of these researchers describe their methodology as case study, some of them do focus on describing a phenomenon within an "intrinsically bounded" system, as Merriam (1998) defines a case (p. 27). A case, according to Merriam, can be a person, program, process, institution, technology, event, or any instance selected—because of "some concern, issue, or hypothesis"— that would offer "as full an understanding of the phenomenon as possible" (p. 28). The phenomenon my study sought to understand was online writing assistance for fully online students and was thus comprised of cases within cases, or what Yin (2009) calls an "embedded multiple-case study design" (pp. 50-53). The institutional OWC and the commercial service (the CS) each offer a synchronous and asynchronous assistance option, resulting in four cases, while the users of these services are the human cases embedded within those four technological cases. Yin (2009) notes that "the evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust (p. 53). Thus, my analyses of two synchronous cases and two asynchronous cases may be more significant than an analysis of the OWC or the CS alone. Case study methodology enabled me to gather perceptions about all four technological cases from a larger group of human cases, present detailed descriptions from a smaller group of human cases, and conduct cross-case syntheses to form a clearer picture of the four technological cases and students' perceptions of them.

Merriam (1998) lists three defining characteristics of case study; it must be particularistic, descriptive, and heuristic (p. 29). By *particularistic*, she refers to the specific focus on a particular phenomenon, situation, or program that the case itself helps explain.

Merriam nots that this focus makes case study design “an especially good design for practical problems—for questions, situations, or puzzling occurrences arising from everyday practice” (p. 29). My study fit this characteristic as it focused on explaining the phenomenon of online students’ selection of one writing assistance option over another or none at all.

By *descriptive*, Merriam (2008) refers to the final product of a case study as “rich, ‘thick’ description of the phenomenon under study”—as complete a description as possible of the instance being investigated (pp. 29-30). Though Merriam states that this description is “usually qualitative” (p. 30), she does acknowledge that “any and all methods of gathering data, from testing to interviewing, can be used in a case study, although certain techniques are used more than others” (p. 28). Yin (2009), more so than any other case study scholar, advocates for quantitative as well as qualitative data as a contributor to rich description, noting that using both can “permit investigators to address more complicated research questions and collect a richer and stronger array of evidence than can be accomplished by any single method alone” (p. 42). Since one of my goals for this study was to present the perceptions and voices of as many online students as possible, a methodology that allowed for both qualitative and quantitative data suited my purposes well. The quantitative data in my study allowed me to add a large number of fully online voices to the conversation and gave me additional evidence while the qualitative data allowed me to create that rich description of student perceptions and the reasons behind those perceptions.

By *heuristic*, Merriam (1998) refers to how case study “illuminates the reader’s understanding of the phenomenon” being investigated (p. 30). Case study can lead to new discoveries, confirm prior knowledge, or add to a reader’s experience (Merriam, 1998, p.30), and I would add that it could complicate or refute prior understanding. Case study offers

explanations, reasons, alternatives, or conclusions for a given phenomenon (Merriam, 1998) which makes it a perfect methodology for my research questions that ask what features students perceive as helpful and why.

Research Context

In a holistic sense, the two "cases" or sites within this study are the institutional writing center and the commercial service; however, the online students' experiences with each service are at the core of the research questions, and thus constitute smaller cases embedded within the larger cases (Merriam 2009). The online students are situated within the context of their online courses, which fall within the context of the online program of the Christian, non-profit, brick-and-mortar liberal arts university described below. Thus, a graphic representation of the research setting looks like this:

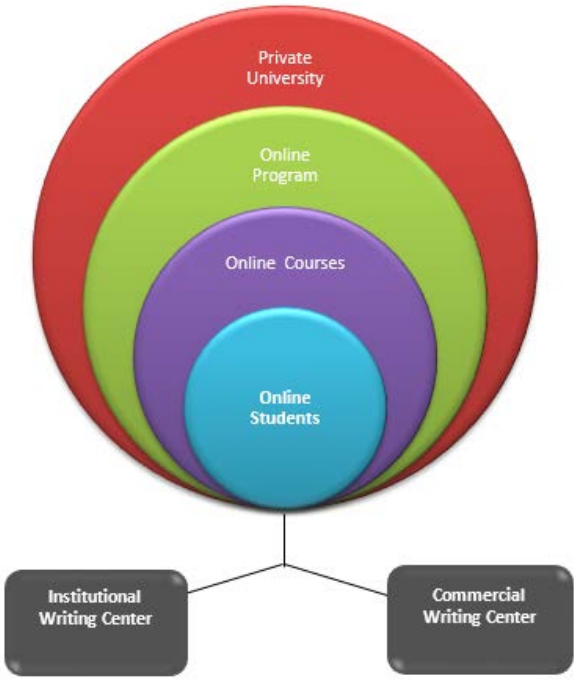

Figure 4. Research context relationships.

The fully online program of this Christian university offers more than 245 online degrees ranging from undergraduate to doctoral levels, and over 85,000 students are currently enrolled (approximately 49,000 undergraduate and 36,000 graduate or post-graduate). The online student population represents all 50 states and 90 countries, though its number of L2 students has not been tracked. The program's course content is delivered on Blackboard via course documents and multimedia formats. The courses are only eight weeks long, so disciplined students can complete 4-6 courses per semester. Content for each course is designed by a faculty member within the university and packaged into all sections of that course; thus, all sections of a given course have the same content, though they are managed by a wide variety of instructors (adjuncts across the nation as well as full-time faculty within the university). These courses attract individuals from everywhere, including international students and members of the U.S. military stationed throughout the world. The online bachelor's, master's, and doctoral degree programs include numerous options in the areas of psychology/counseling, education, business, nursing, law, and—given the Christian distinction—religion, theology, pastoral counseling, and similar degrees.

The Institutional Online Writing Center

The institutional OWC's mission is to help online students at any level of written English proficiency identify, understand, and improve their academic writing strengths and weaknesses. To this end, a student may request written feedback on a rough draft or request an appointment to speak with a tutor via Skype. Depending on total page numbers, papers are returned within 48 or 72 hours and synchronous (live) appointments are generally restricted to one hour. Due to the enormity of the population the center serves, students may submit only one draft per assignment. If they wish to discuss a revised draft that has already received feedback, they must request a

synchronous appointment via Skype. In addition to these services, our OWC website contains numerous aids, handouts, worksheets, links, and presentations on various aspects of writing, such as formatting styles, grammatical errors, and organizational issues. Students may also email the center regarding tutoring requests or brief formatting or grammar questions or ask these questions via live chat during designated weekday hours. The OWC has a strict no-editing policy that students must acknowledge by clicking that they agree with a statement to that effect on the request form each time they submit a request.

The institutional OWC's website is primarily text-based with few images, though the site does include links to a professionally produced OWC promotional video and an amateur audio/visual YouTube tutorial on how to use the tutoring service. The one interactive feature allows students to chat live with OWC staff members during designated hours, but visually speaking, the site design is very limited by the university web management system and therefore mostly consists of text that explains the offered writing assistance options, the center mission, and its policies. Two buttons stand out among the text: "Request Tutoring" and "Live Chat." The OWC and its functions are not currently mobile-friendly but can be accessed on tablets and laptops.

The online tutoring portion of the OWC is a creation of the institution's IT department and is based on a Microsoft SharePoint platform integrated with Microsoft InfoPath forms. It is a complex system involving automated email notifications generated to users, tutors, and supervisors at various stages of the submission, tutor assignment, and feedback processes. It collects all submissions and returned drafts and stores all data that can then be accessed in report form. Currently, the OWC employs three tutor supervisors (two for graduate tutors and one for undergraduate tutors), 22 graduate tutors, and 11 undergraduate tutors. The supervisors assign

tutoring requests as they come in, ensure requests are completed within their given deadline, conduct periodic evaluations of tutor feedback to ensure its quality, and report hours logged for tutors each week. The institutional OWC accepts year-round tutoring requests submitted 24 hours a day, seven days a week, year round, except for mid-December to mid-January when no online courses are in session. Though students are limited to one asynchronous review per assignment, they may use the OWC for as many assignment reviews per term as they wish.

The tutors are all online graduate students enrolled in the institution's online program; most live in other states across the nation and have never set foot on our campus. We hire students from all our major degree programs so we can match students with tutors who know exactly what their professors require. Tutors are hired based on GPA, instructor recommendations, feedback on a sample paper, and a sample of their own academic writing. New hires then complete a rigorous training packet within their first three weeks before they are assigned any requests. The training packet consists of a variety of seminal and recent scholarship on writing center theory and pedagogy, best practices in online tutoring and tutoring L2 writers. The packet requires the review of two student papers at the end of each module to encourage application of principles discussed within a given module's assigned reading.

When tutors review drafts, they are trained to provide front comments, intertextual comments, and end comments as first recommended by Monroe (1988). In these comments, they include a summary of strengths and weaknesses in the submitted draft, distinguishing between global and local concerns. In addition, tutors insert links within the comments to various writing resources and worksheets so students may observe, study, and practice revision strategies on their identified issues. When tutors complete a draft review, they log back into the tutoring service and return to the submitted form to upload the paper. Before they do so, they must fill in

the “Tutor Report” section of the form, a section only visible to center supervisors and tutors. The tutor report consists of a record of total time spent reviewing the request, a needs assessment of the student’s areas of weakness, and a comment box for any elaborative comments tutors may wish to make.

The synchronous appointments must be made at least two days ahead of time, and sessions are conducted via Skype video, audio, and screen sharing features. Tutors are trained to encourage the student to set the agenda and guide the session, though many report sessions with students who prefer the tutor to lead. Tutors make summary notes of the discussion points but encourage students to make revisions or notes as the session progress, just as they would in a face-to-face setting. The student receives the summary comments, but recording such sessions produce files too large to store. Students may opt to record on their end of the session, however.

The Commercial Tutoring Service

The institution also partners with a commercial tutoring service brought on board solely for its subject area tutoring in math, business, and science, but its essay writing and proofreading components accompanied the rest of the package, and according to the institution’s liaison with the tutoring company, are by far the most used components by the institution’s online students. The essay writing assistance is solely synchronous while the proofreading feature has synchronous and asynchronous options. All synchronous sessions are conducted via chat with a whiteboard and file sharing capabilities, and students have 24/7 access to a tutor at any given moment, aside from a few major holidays. However, the institution limits students to 20 hours per semester of commercial service usage, which can be used up quickly with two classes worth of work for each of the two eight-week terms contained in one semester—the common load for the institution’s online students. The commercial asynchronous proofreading option is called “the

drop-off" service, which allows students to submit a draft for review along with an assignment description typed or copied into a textbox for a limited 24-hour turnaround review. Thus, the tutor reviews as much of the draft as he or she can within 50 minutes, then stops and returns the paper. This "drop off" review is similar to the institutional writing center's review, as tutors use a comment feature to point out errors, suggest changes, and point students to the commercial services resources on related writing issues. The wording on their website reads: "Our expert tutors can help write or proofread any paper in any subject you're struggling with." Indeed, during synchronous sessions, the tutor controls the screen and generally makes changes to the student's draft, just as the student may make changes on her own as well.

The commercial tutoring service's website communicates its features and their purposes with colorful images, text, icons, and quotes, including pictures of users and tutors, though no videos or tutorials. Its ease of use features include links and large buttons allowing students to "Find an Essay Writing Tutor," or "Find a Proofreading Tutor." Though it doesn't appear linked to the service's website, a video demonstrating how to use the services' very user friendly mobile app is posted on YouTube, which shows students how to connect to a tutor, upload a picture of their homework, chat with a tutor, and access resources, prior session transcripts, and previously uploaded files all from their tablet or smartphone via the commercial service's mobile app. The website does not promise to avoid editing students' work.

The service claims that its 3,100 tutors have "real-life experience using and teaching their subjects" and that their tutor pool "includes certified teachers, college professors, graduate students, and professionals with Masters Degrees, Ph.D.'s and Ivy League credentials." The site also states that all tutors are screened with "subject exams, mock tutoring sessions, mentor review, and third-party background check." The commercial tutoring service's tutors are

considered outsiders to the institution's online program as well as to its integration of Christian values and biblical worldview, though a few of its thousands of tutors may attend the institution's on-campus program or may be enrolled in its online program. In other words, the odds are significantly against the institution's online students logging into the commercial service and connecting to a tutor with insider knowledge of the online program, instructors, or courses, or one with an intimate understanding of the university's biblical worldview.

Tthe institutional OWC and the commercial tutoring service contrast each other in all three categories of the study's conceptual framework, with advantages and disadvantages to both. Having access to both services provides online students a variety of writing assistance, both synchronous and asynchronous, with a wide array of features from which to choose. Depending on a student's technological skills, time management style, perception of connectedness, and definition of academic progress, that student will prefer some of these options over others, making these sites ideal to determine fully online students' perceptions of features contributing to their growth as academic writers.

Table 1

Comparative Summary of Institutional and Commercial WCs by Feature

	CONVENIENCE	**CONNECTEDNESS**	**ACADEMIC PROGRESS**
Institutional OWC	• Text-based website • 48 to 72-hour turnaround • Scheduled appointments • No mobile access	• Cannot choose tutor • Insider tutors • Skype w/screen sharing • Summary of session-no recording or transcript	• Peer tutors • Full paper review • Unlimited use • Email/Chat for quick questions
Commercial Service	• Image-based website • 24-hour turnaround • 24/7 immediate access • Mobile access	• Can choose tutor • Outsider tutors • Chat w/whiteboard • Transcript of session	• Professional tutors • Limited paper review • Limited use • Chat w/whiteboard for quick question

Participant Selection

The participants in this case study included both random and purposeful samplings (Merriam, 2009) from nearly 90,000 online students attending the institution. My criteria for survey participants were that they be 18 years or older, enrolled in a fully online degree program (as opposed to a certificate program or dual-enrolled in high school and college), and enrolled in any online course offered in the first eight-week term of spring 2016. These criteria resulted in a list of 50,000 students. First, I sent those students a survey (see Appendix B), making those who responded my random sample. The survey included a final question asking whether the respondent was willing to be contacted for a follow-up email interview, which then generated possible contacts for my purposeful sample.

Survey Participant Demographics

This survey's participants include a diverse sampling across degree programs, age ranges, sexes, languages, classifications and writing assistance needs, in keeping with Hewett's (2015b) description of typical OWI students, and particularly fully online students (pp. 12-15). 621 fully online students representing 155 online degree programs participated in this survey; 550 completed all survey questions while 71 did not.

Ages of participants ranged from 18 to 73 years old, with the majority of participants falling between ages 30 and 59 (see Figure 5). Female survey participants doubled the number of male participants (see Figure 6). The majority of participants spoke English as their first language, though 15 other first languages were represented (see Figure 7). Participants represented all classifications, spread nearly evenly between undergraduate (52%) and graduate (48%), with the majority of undergraduate participants at the senior level (24%) and the graduate participants at the master's degree level (44%) (see Figure 8).

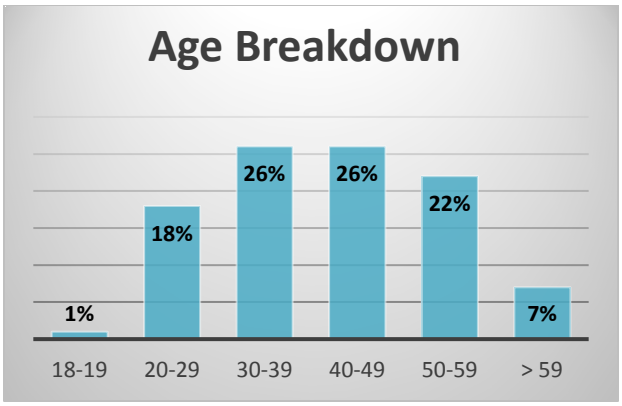

Figure 5. Age breakdown of survey participants.

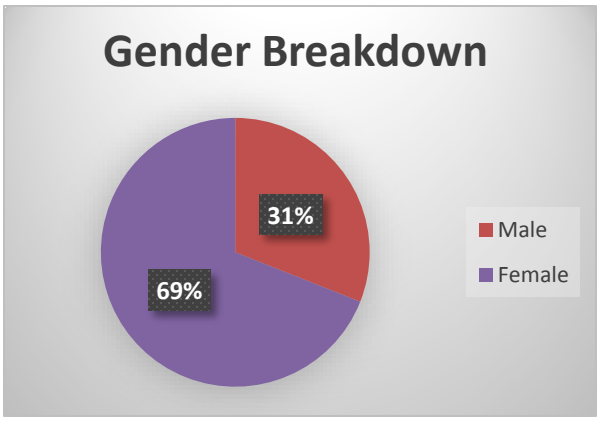

Figure 6. Gender breakdown of survey participants.

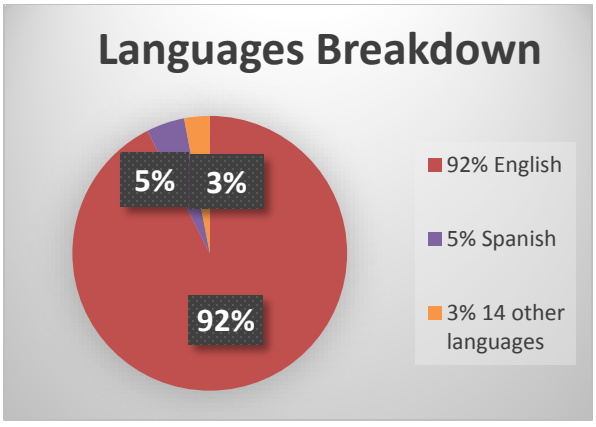

Figure 7. Languages breakdown of survey participants.

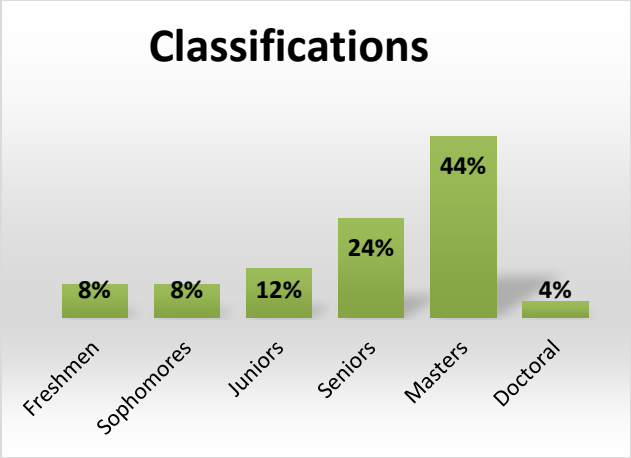

Figure 8. Classifications breakdown of survey participants.

The seniors represented 16 general degree areas with numerous cognates and included 108 females, 44 males, 11 ESL students, and ages ranging from 19 to 68 years old. The masters students represented 24 general degree areas with numerous cognates and included 176 females 91 males, 17 ESL students, and ages ranging from 19 to 68.

Finally, these participants were asked an initial question about whether they had used only one of the two services, both services, or neither, placing them into one of four survey branches (see Table 2).

Table 2

Breakdown of Survey Participants' Service Usage

Which of these statements describes you?	**%**	**Count**
I have used the Online Writing Center's (OWC's) tutoring services.	29.37	173
I have used [the CS's] writing tutoring services.	8.49	50
I have used both the writing tutoring services of [the CS] and the OWC.	9.00	53
I have never used either tutoring service for writing assistance.	47.71	281

None of the above.	5.43	32
Total	100	589

Note. The count for this question is 589 instead of 621 because 27 selected "I do not wish to participate" on Q1 of the survey and 5 did not answer this question.

As seen in Table 2, almost half of the survey participants had never used either service, while the next largest percentage had used only the OWC's services. A nearly identical percentage had used both services or only the commercial service. Each response to this question directed a given participant down a different survey branch about the selected service(s), soliciting feedback about its various features and/or their preferences.

Interview Participant Demographics

Interview participants were selected from those who indicated on the final survey question a willingness to respond to two rounds of emailed interview questions for a $50 Visa Debit Card mailed to those who completed both rounds. To obtain a purposeful sample for the interviews and as many perspectives as possible, I looked among the survey respondents for as much diversity in age, gender, education level, and language as I could find since these were the only demographics to which I had access. In the hopes of securing 12 participants, I selected four to five participants each from three of the four survey tracks: those who had used the institutional writing center, those who had used the commercial service, or those who used both. I also tried to ensure at least two or more selected participants had used each synchronous and asynchronous service since multiple cases provide a richer description than a single case (Yin, 2009). To avoid bias, I did not examine non-demographic survey responses when selecting participants, other than to ensure they had agreed to be contacted and that all four tracks were represented. Thirteen participants completed both rounds of interview questions and became the cases for this study.

Table 3 includes participant pseudonyms, genders, ages, classifications, writing needs (as expressed in the interviews), services used, and number of "visits" or uses of that service.

Table 3

Overview of Interview Participants

Name	Gender	Age	Academic Identity	Service(s)	Visits
OWC Users					
Samuel	M	28	4.0 Senior / APA needs	OWC draft	7
Lydia	F	55	Grad student on probation	OWC draft	41
Leslie	M	57	Grad student / APA needs	OWC draft	2
Victor	M	53	Senior / improve writing	OWC draft	54
Joy	F	47	4.0 junior / APA needs	OWC draft & Skype	19 1
CS Users					
Greg	M	61	Senior / Turabian & grammar needs	CS draft	2
Cassie	F	20	4.0 Sophomore / APA	CS chat	1
JD	M	38	Grad student / better grade	CS draft	3
Tanya	F	42	Grad student / ELL	CS chat CS draft	1 13
Users of Both					
Celia	F	26	Senior / APA, flow, & introduction, conclusion	CS draft OWC draft	3 2
Patty	F	49	Grad student / better grade	CS draft OWC draft CS chat	8 6 1
UB	F	49	Grad student / reading and writing disability	CS chat OWC draft & Skype	9 10 11
Adrienne	F	41	4.0 Senior, self – proclaimed perfectionist / Maintain perfect grades	CS draft CS chat OWC draft & Skype	10 1 9 1

I was unaware of some of the unique identifiers, such as the student with a learning disability, the perfectionist, or the student on academic probation; I did not discover those traits until I read their interview responses. However, as Merriam (2009) notes, "The more cases included in a study, and the greater the variation across the cases, the more compelling an interpretation is likely to be" (p. 49). The diversity among my participants in gender, age, classification, writing needs, and other traits garnered some unique perspectives, demonstrating how such demographics might possibly influence student perceptions of the writing assistance they receive from these services.

Data Sources and Collection

To remain within qualitative research and case study protocol, I collected, analyzed, and examined data from a variety of sources and angles, comparing and contrasting them to provide a rich and detailed picture of online students' perceptions of their experiences with these services. My primary data sources consisted of (a) survey responses, (b) round-one interview responses, (c) round-two interview responses, (d) researcher-generated documents (Merriam, 2009), and (e) the case study database (Yin, 2009). All of these data sources addressed both research questions:

1. Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers?
2. What are the reasons for these perceptions?

Survey Responses

I designed and distributed a Qualtrics survey (see Appendix B) to the participants described in the previous section of this chapter. The survey contained four possible tracks—

those who had never used the online writing center, those who had used only the institutional writing center, those who had used only the commercial tutoring service, and those who had used both. For those who had used either or both services, the survey split into another two possible tracks: those who had received asynchronous tutoring and/or synchronous tutoring from either service. The preliminary survey questions solicited responses about participant goals (short or long-term improvement) and priorities (convenience, connectedness, or academic progress) when seeking writing assistance, reasons why they did not use the other service or any service at all, and the usage frequency and recency of their selected services. The primary survey questions asked participants to rank or rate all the current and possible features of the two writing assistance options as categorized by that same conceptual framework of convenience, connectedness, and academic progress. I designed all survey questions to solicit answers to one of my two research questions: which features do fully online students find the most and least helpful and why? Questions types included ranking for order of importance, Likert-scale, check all that apply, and short answer open-ended questions. Survey responses were collected and stored in my personal Qualtrics account to which I alone have access.

Email Interviews: Round One

Because my participants were online students spread out across states and time zones and because email is the primary means of communication for fully online students, I opted to collect interview data (both rounds) through email (see Appendices D & E). Email as a method of interviewing has both its benefits and challenges, as the literature acknowledges. McKoyd and Kerson (2006) list advantages such as time for participants to respond at their convenience, extensive communication, written responses that need no transcription, and less social pressure due to lack of visual cues that may create judgement. In their study that included telephone, face-

to-face, and email interviews, McKoyd and Kerson (2006) found that the "email interviews were 3-8 pages longer than in-person interviews and 6-12 pages longer than telephone interviews," yielding "detailed, rich data" (p. 397). They also advise researchers using email interviews to "gather data responsively and sensitively" (p. 397). They shared that "to maintain the bond required for good data collection during email interviews, multiple expressions of thanks and other connecting messages were used" and extra effort was made to ensure "that communications were clear but somewhat informal, with friendly salutations and indications that the researcher had read prior responses and tailored questions to clarify information reported previously" (McKoyd & Kerson, 2006, p. 399). When I sent both rounds of interview questions, I followed these guidelines, striving to ensure I sounded friendly and interested in what they had written and still had to write. Others concur that email interviews produce richer data, given the extra time to reflect and to revise and perfect their replies (Ison, 2009; Mann & Stewart, 2000). In Ratislavová and Ratislav's (2014) study that included both face-to-face and email interviews, they found that their participants' responses via email "were more structured and did not involve as much repetition as in the face-to-face interviews" (p. 455).

One challenge to email interviews Bowden and Galindo-Gonzolez (2015) highlight is a delay in receiving replies; their suggested strategy concurs with Meho (2006) who advises that researchers set a response deadline and send up to two reminders, noting that reminders raise the response rate about five times on average. I followed this advice, which worked well, especially with the added incentive of the $50 for completing both rounds. I gave my participants 72 hours from the time I sent the email to reply thoroughly to the first round of questions. I gave them the same amount of time to reply thoroughly to the second round. I sent one reminder at the 48-hour mark for each round per participant. Only two of the 13 were a day or two late—I still paid them.

Another challenge that may be encountered more often in email interviewing than in face-to-face is more participant drop off or lack of interest, but a suggested strategy to help mitigate this possibility is to tell participants from the beginning the specific length of time and/or number of sessions to which they are committing (Bowden & Galindo-Gonzolez, 2015, p. 81). I included this information in both the final survey question in which they indicated their willingness to participate and in the initial emailed consent form to which they had to respond before I sent the first round of questions.

Both rounds of my study's interviews were semi-structured, but in a different way than can be ascribed to oral interviews. According to Merriam (2009), semi-structured interviews have a "mix of more and less structured interview questions" with "no predetermined wording or order" whereas unstructured interviews contain "open-ended, flexible, exploratory" questions and are used "when the researcher does not know enough about the phenomenon to ask relevant questions" (p. 89). However, neither of these categories quite fit my interview protocol for round one. Of necessity, given the venue of email, all my round-one questions were in predetermined wording and order—the same for every participant (see Appendix D); however, they were all open-ended questions that fell into Merriam's (2009) categories of "experience and behavior questions" and "opinions and values" questions (p. 96) to solicit details of participant experiences. I knew enough about the phenomenon to ask relevant questions organized by pre-session, session, and post-session categories aimed at soliciting participants' perceptions of and experiences with the services' features of convenience, connectedness, and academic progress.

Email Interviews: Round Two

Once round-one interview responses were returned, I reviewed the responses, reviewed the participant's survey responses, and sent a follow-up interview email (Appendix E) containing

what Merriam (2009) calls “interpretive questions” that encouraged the participant to confirm or clarify what I thought I was understanding about their experiences as well as offer more feedback (p. 98). I asked no more than ten follow-up questions, usually less, and I included questions about any initial interview responses that seemed to contradict their survey responses. For instance, in round one, when Hope described her satisfaction with the writing assistance she received from the OWC draft review and Skype services, she noted that they increased her confidence in her writing, I wrote the following question to encourage further comment:

> So you feel more confident as a writer, but can you elaborate on anything specifically you have learned that has permanently improved your writing skills or made you a better writer? What foundational information specifically has helped? (Hope, R2i, p. 6).

Hope replied by describing feedback that she felt had given her more confidence, specifically APA feedback, using correct voice, overusing “that,” and avoiding first person.

Upon returning the final set of interview responses, participants were asked to choose their own pseudonym and provide a mailing address so I could send them the $50 Visa Gift Card. Some chose their own pseudonyms and others requested that I choose one for them. Interview responses were stored in specific, password-protected email files as well as entered into my case study database (described below). All participant names were changed to pseudonyms while I analyzed and categorized the interview data. These precautions were sufficient given the comparatively impersonal nature of the subject matter.

Researcher-Generated Documents

Merriam (2009) defines researcher-generated documents as “documents prepared by the researcher or for the researcher by participants after the study has begun;” she states the purpose for their generation is “to learn more about the situation, person, or event being investigated” (p.

149). For instance, a researcher might ask a participant to keep a diary or write a historical account (Merriam, 2009). Merriam notes that this category of supporting documentation also includes "quantitative data produced by the investigator," and she names statistical data from surveys, which are "treated as documents in support of a qualitative investigation" (p.149). For my survey, a seasoned statistician and I generated various charts, graphs, and tables that cross-referenced or compared various basic survey responses in order to answer my research questions with more depth and detail. I included these researcher-generated documents in my case study database, where I made notes and wrote preliminary analyses on many of them, deciding which more effectively addressed what I sought to learn (See Appendix F).

The Case Study Database

One of Yin's (2009) principles of data collection for case study is to create a "formal, presentable" database, organized well enough and rigorously enough so that other researchers could, if necessary, review all the evidence, notes, analyses, and other types of study-related work directly themselves (p.119). He names case study notes, documents, tabular (quantitative) materials, and researcher narratives as items that may comprise the bulk of a case study database (Yin, 2009). I used a Microsoft OneNote notebook to create my case study database, a tool that allows users to create as many tabs as needed and, within each tab, an infinite number of pages on which note cards of any size can be created. My case study database contains figures, tables, notes, outlines, memos, questions, frustrations, cross-case analyses, participant profiles, survey questions, and much more. This description may make my database sound disorganized, but with all of my meticulously labeled tabs and pages within those tabs, I am confident another researcher would be able to look through it and understand all the steps I took from my literature review through to my final chapter. Though my database is topically organized rather than

chronologically, someone with an understanding of qualitative research could see how my study moved from collected data to analysis to findings and conclusions. My database file is stored in the cloud, accessible to me from any device with my Microsoft account password so that if my computer ever crashed, I would not lose it, and it synchronized instantly from my laptop to the cloud anytime I made a single change. I began creating the data collection portion of my database as soon as I began building my survey and continue filling it with notes until the completion of this study. I consider it a source of data in my study not merely because it holds much of the rest of my study data but also because I have generated further data within the database by looking at the data from various angles, organizing and reorganizing it in order to saturate the data and pull all I can from all sources.

Chronology of Data Collection

Collecting survey responses and interview responses (both rounds), took about three weeks total from the time I sent out the survey link until the last participant returned the last round of interview responses. I selected a strategic date to distribute the survey in order to optimize survey response since online students at this institution received numerous emails per day from various offices and arms of the institution as well as twice per week from their current instructors, in addition to all the surveys they received within from the university within a given month. The university marketing team I worked with concurred with my idea to send out my survey the last few days of the eight-week term so students would see it before they quit checking their email during the week in-between terms and would possibly take the time to fill it out after they finished their course work. I limited the survey to two weeks rather than leaving it out there longer to collect more data because the longer they waited to take it, the further removed they became from their last experience with either writing service since my list targeted

only those enrolled in courses for the term that just ended. I wanted the experiences as fresh in their minds as possible.

I began selecting interview participants from the incoming survey responses as soon as I could for that very reason as well. I wanted those with recent writing service experience to fill out the first round of questions as soon as possible before their memories faded. The $50 incentive for completing the first and second rounds within 72 hours of receiving them encouraged a quick return of thorough responses from nearly all of the 13 participants who completed both rounds. Since I sent the questions to all of them during the weeklong break or the first week of the new term, they also had more time to participate than if I had sent them questions later into the next term.

Table 4

Data Collection Schedule

Month	**Data Collection Tasks**
February 17 – March 9, 2016	• Completed Qualtrics training • Created case study database • Built and tested survey
March 10 – April 1, 2016	• Distributed survey • Selected participants • Emailed consent forms, first rounds of questions, and second rounds of questions. • Began analytic memos in database
April – June, 2016	• Generated survey analysis charts, tables, and graphs • Wrote extensive notes on survey results in case study database • Continued analytic memos in database
June – August, 2016	• Drafted analysis of survey results • Continued analytic memos in database
September – November, 2016	• Wrote two sets of extensive notes in the case study database on all 13 participants' interview responses for within-case and cross-case analyses. • Continued analytic memos in database

Data Analysis

Yin (2009) notes that a good starting point for case study data analysis is to "play" with one's data (p. 129). Miles and Huberman (1994) provide a set of activities for doing just that, which include these six actions:

1. Putting information into different arrays
2. Making a matrix of categories and placing the evidence within such categories
3. Tabulating the frequency of different events [or in my study's case, different responses]
4. Examining the complexity of such tabulations and their relationships by calculating second-order numbers
5. Putting information in chronological order or using some other temporal scheme. (as cited in Yin, 2009, p. 129).

I used all six actions in my selected analysis methods order to "make sense" out of my data, which Merriam (2009) says involves "consolidating, reducing, interpreting what people have said and what the researcher has seen and read—it is the process of making meaning" (p. 175-76). She adds that data analysis involves "moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and interpretation." (p. 176). In this section, I describe how I employed quantitative analysis, within-case analysis, cross-case synthesis, and analytic memos to make meaning from my data and answer the study's research questions about which features are most helpful and why.

Quantitative Analysis

I will not go into detail about my analyses of survey responses here, as I explain my processes further in Chapter Four, but for the extra analyses beyond my capability or that of Qualtrics, SPSS was used to generate cross-tabulations and comparative analyses of those who

had rated certain questions more highly than others had. For instance, students could agree or disagree that they sought writing assistance for short-term reasons (a higher paper or course grade) or long-term reasons (permanently improving writing skills) while in another question, they were asked to rank their preferences for various synchronous and asynchronous technological approaches to tutoring (see Appendix B). To find out whether students' short-term or long-term goals impacted their preferences for certain tutoring approaches, SPSS was used to cull out those who had ranked a short-term reason over a long-term and vice versa and generate data for each group's asynchronous and synchronous preferences. That data was then used in Excel to create a representative bar graph. The same process was used to examine whether students' prioritizing of convenience, connectedness, and academic progress over each other influenced their preferences.

To broadly address the study's questions of which features and why, students were asked to identify which services they had used. Depending on their answer, students were then directed to one of three questions that included a textbox for "other" as the final option: Why haven't you tried either service; why haven't you tried the OWC; or why haven't you tried the CS? In order to ascertain the most common "other" reasons for not having used a given service, I categorized their reasons and counted the frequency of each category. I then displayed the results in tables, first in my case study database (see Appendix F), and then later in Chapter Four.

These are just two examples of how I analyzed my survey data. Qualtrics analyzed and presented most of the data in ways that were easily interpretable. But when I wished to compare data between groups of respondents or cross-tabulate answers to one question with answers to another, SPSS and my hired statistical expert were of great help I am by no means trained in statistical analysis, so in order to mitigate possible researcher bias in my interpretations, I hired

an objective third party, a professor of statistics with no vested interest in the results, to work with me in conducting the more complex analyses. I entered all of the notes, charts, and graphs we generated into my case study database and created more analytic memos (see this method below) as I continued to examine and re-examine the data over time.

Within-Case Analysis

As Merriam (2009) explains, a multiple case study has two primary stages of data analysis: within-case analysis and cross-case analysis. In the former, "each case is first treated as a comprehensive case in and of itself. Data are gathered so the researcher can learn as much about the contextual variables as possible that might have a bearing on the case" (Merriam, 2009, p. 204). My approach to within-case analysis included two stages: (a) constructing a profile chart of each of the 13 interview participants, and (b) consolidating each chart into a narrative-style profile, using as many of the participants' own words as possible in order to accurately convey their perceptions and experiences.

Creating profile charts replaced the steps of interview transcription and coding most usually employed in case study research. I constructed these charts within my case study database (see Appendix G) by examining each participants' survey responses and two rounds of interview responses and categorizing the data according to demographics, pre-session perceptions, session-perceptions, and post-session perceptions, which reflected how the round-one interview protocol was organized (see Appendix B). The demographic categories of each profile were age, gender, degree program, classification, and any distinguishing characteristics about their academic identities (see Appendix G). Pre-session categories included how they discovered the services, their writing needs and priorities, the number of times they had used or contacted the services, and their perceptions of the services' usability. During-session categories

captured their perceptions of feedback received and whether they felt collaboration had occurred. Post-session categories focused on their perceptions of their own revision practices and writing improvement resulting from their sessions. My process for building these profiles involved reading over the written interviews and individual survey responses several times, and then filling in a chart for each of the abovementioned categories, pasting in their descriptions in their own words, supplementing with data from their survey responses, and summarizing their experiences in my own words.

For example, UB, the interview participant with a cognitive disability, wrote of her session experience with the OWC draft service,

> The result that I hope to achieve on my papers was corrections in writing with assistance with my grades. I did not received those result. Each comment on the paper should state the need that to be change. I know this can be time consuming, but for a person with a disability it is needed. (UB, R1i, p. 2)

I copied this comment into my profile chart of UB under "Perceptions of feedback helpfulness" and cross-referenced it with UB's lower survey ratings for the OWC draft service, demonstrating her consistency in her responses. My use of her own words not only gave UB a voice but also demonstrated how her cognitive ability affected her writing. I did include my own interpretation of her criticism as well, noting that UB seemed to want each error in her paper corrected for her because of her disability. Yin (2009) refers to such an analytic strategy as "developing a case description" according to an organizational framework (p. 131). Constructing these profile charts for participants who had used only one of the four assistance options was relatively easy, but the task grew more complex, the more services each participant had used.

Consolidation of these charts into a cohesive narrative of each participant's experiences (see Chapter Five) helped reduce this complexity and made their experiences more relatable for readers of this study. The consolidation writing stage also helped me live their experiences with them in a way, providing insight into why they might have made the choices they did or perceived certain aspects the way they did. Since my participants were online students and the sessions had already taken place online, observations in-person or otherwise were not possible. The advantage to this scenario was that their perceptions were initially untainted by my presence or perceptions, but the disadvantage was the inability to get a sense of them in any other way than from what they had written in response to the questions, which is not a usual approach for case study research. The act of writing their interview responses into narrative profiles helped restore some of that lost intimacy. In deconstructing their responses into categories and then reconstructing them into narratives, I became better acquainted with my participants as individuals with unique backgrounds, academic identities, and writing needs, which may or may not have influenced their perceptions.

Cross-Case Syntheses

While Merriam (2009) calls this stage cross-case analysis and defines it as a way "to build abstractions across cases" (p. 204), Yin (2009) refers to it as cross-case *syntheses*, which better defines my process in Chapter Six of this dissertation. One of the strategies Yin (2009) recommends for cross-case syntheses is "the creation of word tables that display the data from the individual cases according to some uniform framework" (p. 156). To form a holistic picture of participants' perceptions of each service—OWC draft, CS draft, OWC Skype, and CS chat; I created preliminary word tables (see Appendix H) synthesizing interview data from across

individual cases into the same conceptual framework that informed the study from the start: features of convenience, connectedness, and academic progress.

The initial stage of creating these word tables occurred simultaneously with my creation of the profile charts for the within-case analysis. As I created the profile charts in my case study database, I also continually updated a preliminary word table for each service, adding participant perceptions (their own words and their survey ratings) of its design features—including ease of access, ease of use, timeliness, connectedness, academic improvement, and helpfulness or hindrance to growth as writers. For instance, when I read UB's comment, "I love the Skype services, but the time was limited" (UB, R1i, p. 2), I copied and pasted that comment into the Skype service's preliminary word table under Convenience: Timeliness. Finally, I analyzed each lengthy word table for patterns where the same reaction or perception occurred more than once and placed them into smaller synthesized tables, one per service. Chapter Six presents those final word tables and my analysis of them.

Analytic Memos

Saldana describes analytic memos as "researcher journal entries" about "the participants, phenomenon, or process under investigation" that go hand in hand with data analysis (2009, p.32-33). "Whenever *anything* related to and significant about the coding or analysis of the data comes to mind, stop whatever you're doing and write a memo about it immediately," advises Saldana (2009), p. 33). He recommends reflecting and writing about the following:

- how you personally relate to the participants and/or the phenomenon
- your study's research questions [as related to a datum or code]
- your codes [or framework categories] and their operational definitions
- the emergent patterns, themes, and concepts

- the possible networks among the patterns, categories, themes, and concepts
- any emergent or related existing theories
- any problems, personal dilemmas, or ethical dilemmas with the study
- future directions for the study (Saldana, 2009, pp. 34-40)

Sometimes I found myself waking in the middle of the night, jumping out of the shower sooner than I had planned, excusing myself from meetings, or opening my laptop in the middle of a meeting to write an analytic memo in my case study database—a memo on some new thought that had occurred to me about one of the above topics or a different topic altogether. A good many of my memos related to organizational frameworks for analyzing or presenting my interview data. Others related to different ways of approaching the survey data. Several memos helped me develop clarification questions for round-two interviews. Memos ranged from simple reminders to myself to revision plans for my first three chapters to long and detailed case analysis. Whatever the memo type, I always found the exercise helpful, not only for getting my thoughts and ideas down before I forgot them, but also for generating new approaches and perspectives that in turn yielded new data or analyses.

Validity and Reliability

Throughout this chapter, I have described the ways in which I collected and analyzed data for this study, but not as directly connected to the common considerations regarding research trustworthiness and rigor. To find ways to increase the construct validity, internal validity, external validity, and reliability of my study's instruments, analyses, and findings, I followed Merriam's (2009) and Yin's (2009) recommendations.

In order to attain construct validity, I had to ensure the survey and interview questions measured what they were supposed to measure or obtain the data they were intended to obtain.

Both Yin (2009) and Merriam (2009) recommend using multiple sources of data in order to raise a case study's quality of construct validity. Thus, I continually checked to ensure my study's survey and interview questions fit well into my conceptual framework derived from OWC design literature and online writing instruction scholarship. I also analyzed and crystallized data from a variety of angles but always within that same conceptual framework in order to raise the level of its construct validity.

To achieve a higher level of internal validity—how well research findings match reality—Merriam (2009) advocates engaging data to the saturation point, practicing researcher reflexivity, and soliciting peer evaluation. I engaged my data as thoroughly as possible from all angles until no new information or perspectives came from them, and I solicited peer evaluations and feedback from my weekly dissertation group as well as from my dissertation committee members, thus moving as far toward internal validity as is possible for this type of study. Finally, given my biases as creator and director of the institutional writing center and my adherence to the Christian beliefs and values espoused by my institution, I recognized that researcher reflexivity is essential and took steps to mitigate my researcher position as described below.

In the spirit of researcher reflexivity, I do acknowledge that during the course of this study, I was positioned in relation to this study's holistic cases (the two tutoring services) and embedded cases (the students themselves) as both an insider and outsider, which Hellawell (2006) contends is the ideal researcher positioning. My various connections to the research contexts and to the students (see Figure 9) made me a highly invested stakeholder in the results of this study, and not only because of my professional status in each context, but also because of my passion for the students and my desire to do what I could to ensure their academic success.

My insider and outsider positions brought with them certain biases (results I hoped to see) and certain possible influences on interview participant responses, which my interview method was designed to mitigate.

My insider position as creator and director of the institutional online writing center had potential to influence my interpretation of the results and might have influenced interview participant responses. I took several steps at several stages to diminish these possibilities. In selecting participants, I was careful not to look at their survey responses and focused solely on

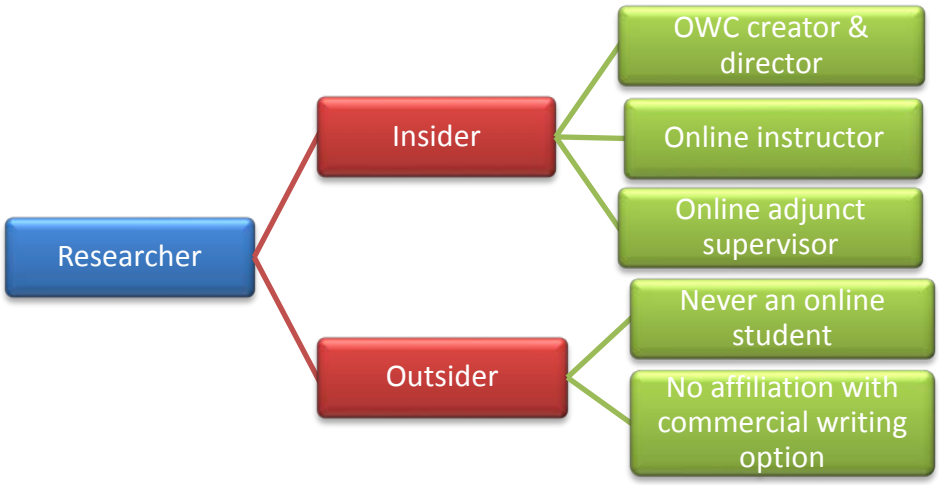

Figure 9. Researcher positions.

which services they had used and their demographic data in order to include a diverse cross-section of participants. In the email interview protocols (Appendices C, D, & E), I stressed how essential thoroughness and honesty was to the study and that receiving the $50 compensation hinged on how thorough and honest they were. The fact that several of them described negative experiences with the OWC I direct indicates this strategy worked. In creating my participants' profile charts, I was careful not to leave out such negativity and constantly returned to the original interview data to ensure I had not unintentionally ignored any negative perceptions of the OWC or any positive perceptions of the commercial service. As previously noted, I hired a

statistician to assist with my survey data, one who had no stake in the results who could double-check my work and interpretations without bias. In every step of the study, I maintained reflexivity, constantly evaluating each interpretation, analysis, and summary for potential bias in order to achieve a higher level of internal validity.

As to external validity, I had an obligation to readers (other researchers and practitioners) to provide enough variation and detail for them to determine whether or not the findings could or should be applied to their own situations (Merriam, 2009, p. 226). Yin (2009) notes that using multiple cases allows for "replication logic"—one case's results repeats another's or contrasts with another's for predictable reasons (p. 54) and cross-case syntheses in which both quantitative and qualitative data may be analyzed for patterns across cases to compare, contrast, and/or hypothesize, perhaps even creating "subgroups or categories of general cases" (pp. 156-160). My study allowed for a thick description of settings, participants, and findings, for maximum variation of holistic and embedded cases, for employment of replication logic, and for cross-case syntheses, all of which I used in order to make the findings as generalizable as possible, notwithstanding some unique characteristics of the research site, holistic cases, and embedded cases.

To achieve Merriam's (2009) understanding of reliability, I used my case study database to ensure that "the findings are consistent with the data collected" (p. 221). Yin (2009) advises recording each minute step in the research "so that an auditor could in principle repeat the procedures and arrive at the same results" (p. 45). As mentioned in the "Data Analysis" section above, I maintained a case study database with tabs and pages for literature review sections, interview participant data, profile charts, survey results, word tables, and analytic memos. This database not only aided in creating an audit trail for reliability (Merriam, 2009), but enabled

easier analysis of data and cross-case syntheses, thereby contributing to the study's validity as well.

Ethical Considerations

Not only must good research be valid and reliable, but it must also be ethical. I obtained IRB approval from both the research site and my degree program site and instituted other customary steps to ensure ethicality. Above, I have noted in passing that I obtained participant consent at various phases of my research protocol, but a summary of those actions as they connect to the common areas of ethical concern is fitting, particularly for a study whose focus is on adding participant voices to ongoing scholarship.

Informed Consent

An informed consent page (Appendix A) preceded the survey, explaining the study in full, noting that students' participation in the survey would not be anonymous to researchers but would be kept anonymous in the results and findings. This same consent page informed potential participants that by taking the survey, they gave consent to the use of all university and/or commercial data pertaining to their tutoring sessions as long as their names were kept anonymous and all aforesaid data was duly protected from anyone other than the researcher or those who already have access to it within the normal course of their duties. I also obtained informed consent via email (Appendix C) from interview participants, describing the interview process, stages, and deadlines. Recipients were required to respond to the informed consent and agree to all conditions before I sent them the first round of interview questions.

Confidentiality

Though the survey participants were not anonymous to me, I changed all their names to pseudonyms in the case study database, presentation of results, and discussion of findings.

Changing names was imperative, as the university's unique characteristics make it easier to identify, even without naming it. Only I know which pseudonym corresponds to which participant's actual name. Any mention participants made of specific tutors I also replaced with pseudonyms.

Data Access and Control

Only my participants and I had access to non-anonymous survey and interview responses. The statistician who assisted me had an anonymous version of the survey data without student names or demographics included. All qualitative data was stored in my password-protected email files, my password-protected document files, or in my password-protected OneNote notebook with no actual participant names. These standard protocols are sufficient for this study, considering that minimal to no harm would result should the participant names and data be made public.

Chapter Summary

In this chapter, I described the participants of this study as students enrolled in a wide variety of fully online degree programs at a Christian non-profit, four-year liberal arts univesrity. I discussed my case study design and the steps I took to collect and analyze data from a survey and two rounds of email interviews. In the following chapter, I present the results and analysis of participant survey responses in ways that most directly address this study's research questions.

CHAPTER FOUR

SURVEY RESULTS

The survey administered in this study sought answers to the research questions, "Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers?" and "What are the reasons for these perceptions?" Thus, initial questions attempted to ascertain online students' academic goals and primary priorities (i.e., convenience, connectedness, or academic progress) in selecting one type of service and its design over another. Subsequent survey questions asked all participants to rank their synchronous and asynchronous preferences as well as their tutor preferences. Finally, participants who had used either service's asynchronous and/or synchronous options rated them on strength of convenience, usability, collaboration, and application of OWI principles.

I share this survey's findings in detail below, but in general, they seem to confirm current OWI principles while complicating OWC design literature in some ways. Survey findings indicate that students want to prioritize academic growth over convenience, but convenience features nearly always eclipse academic growth. Survey findings also indicate that connectedness and collaboration are not as much of a priority for online students as OWC design literature has indicated they should be, yet these findings do align with OWI principles. Survey findings indicate that the commercial service's (the CS's) users more strongly perceive its implementation of OWI principles than do the institutional OWC users, though both sets of users perceive OWI principles employed in their writing assistance. Further, both sets of users acknowledge that each service has helped rather than hindered their growth as writers. Finally, findings also indicate that a wider range of assistance options may be necessary to meet the wide variety of needs and diverse situations represented in most online student populations.

Participants' Reasons for Not Using Either or Both Services

Before presenting participants' goals, priorities, and perceptions when seeking writing help from either service, I here share the reasons survey participants gave for *not* using one or both services. Noting their reasons for non-usage sheds light on which features keep online students from seeking writing assistance when it is readily available. I first present participants'' reasons for not using either service, followed by reasons the OWC users had never tried the commercial service and the reasons the CS users had never tried the OWC.

Participants' Reasons for Not Using Either Service

The 281 survey participants who indicated they had never used either service were then asked why they had not. The most frequent reason for non-usage was lack of time, followed by lack of necessity, "other," lack of usability, lack of awareness, and disinclination to share (see Table 5).

Table 5

Survey Participants' Reasons for Non-Usage

Why haven't you used either service?	%	Count
I wasn't aware they existed	18.15	49
I do not need writing assistance	25.56	69
I didn't have time to seek assistance	33.33	90
The process seemed too difficult	19.63	53
I dislike sharing my writing	6.30	17
Other (explain in text box below)	24.07	65

Note: Participants could check all answers that applied.

Most participants who selected "other" used the given textbox to expound upon reasons already provided in the initial question, but one other significant reason emerged not offered in the original question: the availability of other sources of assistance such as writing aids, editing

software, proofreading by a friend or relative, instructor assistance, etc. Assistance from other resources was the third most frequently mentioned reason among text-box explanations after lack of necessity and lack of time (see Table 6).

Table 6

Textbox Explanations for Not Using Either Service

Reason	**Count**	**Survey Numbers**
Lacked time	12	30, 124, 148, 155, 170, 224, 304, 378, 392, 417, 428, 605
Process seemed too difficult	7	94, 189, 272, 302, 370, 397, 503
Got help elsewhere (family, friend, instructor, online resources, purchased editing program)	10	91, 173, 240, 258, 311, 335, 358, 455, 474, 567
Did not need the help	16	3, 55, 73, 98, 183, 239, 245, 283, 337, 343, 356, 376, 382, 394, 398, 499
Felt anxiety / depression / fear about sharing writing	5	1, 18, 126, 277, 325, 455
Did not know services existed	2	496, 550

Note. The count refers to frequency of response. The survey number refers to the individual survey on which the textual response appeared out of 621 surveys.

Textbox comments relating to convenience addressed students' lack of time and the services' seeming lack of usability. Comments addressing lack of time included responses like these:

- "Like most people, I am 'fighting the clock' most of the time; there is no time for 'turn around'" (survey 30).
- "Being a fulltime teacher and taking online classes made it too difficult to finish the writing projects far enough in advance to allow me time to submit my work and get a reply in time to do what I needed to do to turn in my assignment without penalty for a late assignment" (survey 155).

- "I work three jobs and often only have so much time to begin with but would love to take advantage of it if I could" (survey 392).

Comments addressing usability (or lack thereof) included responses like these:

- "I saw advertising, but did not ever grasp the benefits of the programs or what writing assistance services entail" (survey 94)
- "The process seems confusing to me. I'd love to learn more about it. I wish there was a set of directions sent out that tells how to be apart [*sic*] of this program" (survey 370).

Some comments actually combined poor understanding of usability with lack of time:

- I have thought about it but didn't have time to figure out how to use it and wasn't sure I would get feedback in time" (survey 428).
- "Lack of time to understand how the services work" (survey 605).

All these comments emphasize the nature of fully online students' busy lives and the typical time constraints for adult learners taking condensed courses and thus the need for the most convenient writing assistance possible—assistance that seems immediately appealing and easy to understand and use. Despite the fact that both services prominently display brief video tutorials explaining how to use the service, many students still perceive these services as too time-consuming and inconvenient, thus hindering the possibility of their growth as academic writers.

Participants' Reasons for Not Using the Commercial Service

The 173 survey participants who indicated they had used only the OWC were then asked why they had not tried the commercial service. Nearly half, 43.05 % indicated they were not aware the university provided free access to it, 27.81% marked "other," and at least 10% or higher also noted convenience, connectedness, and usability as off-putting factors (see Table 7).

Table 7

OWC Users' Reasons for Not Using Commercial Service

Answer	%	Count
I wasn't aware [my university] partnered with [the CS]	43.05	65
The process for using [the CS] seemed too difficult	10.60	16
[The CS] seemed less helpful for permanently improving my writing skills	5.96	9
[The CS] seemed less helpful for fixing my paper	6.62	10
[The CS] seemed less collaborative	3.31	5
[The CS] seemed less connected to the university	12.58	19
[The CS] seemed less convenient	15.89	24
Other (include text box)	27.81	42

Note. Participants could check all that applied.

Fewer OWC users perceived the commercial service as less helpful for academic growth or less collaborative, but the most frequently mentioned reason in the textbox explanations was that the OWC was sufficient for these students' writing needs (see Table 8). The other two most common textbox comments related to lack of time and lack of necessity (interesting responses since these users still had the time and the necessity to use the OWC but somehow perceived the 24/7 commercial service as less convenient and/or not needed).

Table 8

OWC Users' Textbox Reasons for Not Using Commercial Service

Reasons	Count	Survey Numbers
Lack of time / Doesn't fit my schedule	7	37, 188, 242, 253, 352, 446, 465
Process seems too difficult	2	23, 483
The OWC meets my needs	10	28, 47, 89, 96, 268, 286, 301, 377, 415, 435
Did not need the help	7	11, 130, 187, 227, 381, 505, 546
Thought I would have to pay	1	300
Never thought about it	3	186, 174, 207
Did not know it existed	1	35

Responses about the OWC's sufficiency included comments such as these:

- "Did not need additional services" (survey 89).
- "[The university's] online writing center tutor works great!" (survey 268).
- "OWC provides what I need, was referred to OWC by advisor" (survey 286).
- "really...so far I've only had one course and for this course used the OWC which was a good experience" (survey 415).

Essentially, those students who happened to try the OWC first were satisfied and saw no need to look elsewhere. One response regarding lack of necessity for using the commercial service stated, "I do not know why I would choose to work with [the CS]. I have little incentive to learn more about what they offer" (survey 11). The other six were simply variations on "I didn't need to," all of which may have been their alternate way of saying that the OWC was sufficient for their writing needs. One participant's response regarding lack of time is revealing: "I never considered [the CS] for this. Save my hours to concentrate on other subjects" (survey 37). The "hours" most likely refer to the 20 hours per semester allotted to students for using the commercial service. Apparently, this participant wished to save his or her allotted hours for subject area tutoring such as math, science, or business rather than using them on writing tutoring, which the OWC offers without limit.

Participants' Reasons for Not Using the OWC

Similarly, the 50 survey participants who indicated they had used only the commercial service were also asked why they had not tried OWC. Though the percentages may be higher due to the much smaller sample (50 versus 173), their responses provide a significant contrast to OWC users' reasons for not trying the commercial service. Contrasting percentages of Table 8

with Table 9 show that students are much more aware of the OWC's existence than they are of the commercial service's availability. However, a higher percentage of the CS users felt the OWC lacked usability, collaboration, and convenience and would be less helpful for fixing their paper. None of the 50 participants viewed the OWC as less connected to the university, which is not surprising. The contrast of percentages reveals the commercial services' users find that service much easier to use, much more convenient than the OWC, and better at helping them "fix" their papers. Yet 47 out of 50 of them recognized that the OWC might be more helpful for improving their writing skills permanently.

Table 9

CS Users' Reasons for Not Using the OWC

Answer	**%**	**Count**
I wasn't aware [the university] had an online writing center	10.87	5
The process for using the OWC seemed too difficult	30.43	14
The OWC seemed less helpful for permanently improving my writing skills	6.52	3
The OWC seemed less helpful for fixing my paper	19.57	9
The OWC seemed less collaborative	15.22	7
The OWC seemed less connected to the university	0.00	0
The OWC seemed less convenient	34.78	16
Other (explain in text box below)	50.00	23

Note. Participants could check all that applied.

The commercial service textbox commenters said the commercial service met their needs nearly as frequently as the OWC users who declared the same about their chosen service, given the difference in number of respondents (see Table 10). As with the OWC users, this result at first seemed to suggest that those who used the CS first were satisfied with it and did not see a need to look elsewhere for writing assistance, though one CS respondent said he sought help beyond the

CS from OWC writing aids: “I just haven't tried the online writing center tutor. I have viewed and used the resources on the online writing center page which was very helpful” (survey 238). Another CS user shared that “as an alumni [*sic*]of University of Phoenix I still have assess [*sic*] to writepoint” (survey 338), while another simply declared, “I used another site” (survey 361), which may or may not be referring to the CS itself. The comments related to time were similar to ones already mentioned above, but those related to usability leaned more toward accessibility than the comments from participants who had not tried either service. One CS user wrote of the OWC: “I truly do not know how to and don't have time trying to figure the navigation out although it has been taught. I sure wish OWC was learning disabled friendly” (survey 217). Another wrote, “I never knew how to use it. It also seems to be offline when I try to use it” (survey 379).

Table 10

CS Users’ Textbox Reasons for Not Using the OWC

Reason	**Count**	**Survey Numbers**
Lacked time	5	86, 185, 232, 386, 541
Process seemed too difficult	3	217, 379, 413
Got help elsewhere (family, friend, instructor, resources, purchased editing program)	3	238, 338, 361
Did not need the help	1	256
[The CS] meets my needs	2	276, 471
OWC unavailable late at night / immediate [CS] availability	3	263, 341, 448

All these reasons for non-usage of either or both services reveal convenience and usability factors as of utmost importance, with connection to the university as a slightly higher priority for OWC users and fixing their paper as a slightly higher priority for the CS users.

Participants' Perceptions of Best Tutor Credentials

Before participants answered questions related to the services they had used, all were asked to rank their tutor preference according to specific credentials. A total of 460 participants opted to rank their tutor preferences, including 144 who had used only the OWC and 45 who had used only the commercial service. The following table shows that the largest percentage of the 460 participants who answered this question preferred a tutor with a degree in English or writing over tutors of their own choosing, tutors with similar values, tutors with experience in their degree program or tutors outside the institution who are excellent writers.

Table 11

All Participants Tutor Preference Rankings

All Users' Preferences	**1st**		**2nd**		**3rd**		**4th**		**5th**	
A tutor who shares the same values as I do	9.57%	**44**	18.48%	**85**	24.35%	**112**	24.13%	**111**	23.48%	**108**
A tutor who has earned degree in English or writing	50.00%	**230**	23.91%	**110**	13.70%	**63**	8.26%	**38**	4.13%	**19**
A tutor I chose myself from all available tutors	17.39%	**80**	22.83%	**105**	16.96%	**78**	23.91%	**110**	18.91%	**87**
An excellent writer from outside of my institution	2.61%	**12**	10.43%	**48**	22.83%	**105**	26.52%	**122**	37.61%	**173**
An excellent writer ahead of me in the same or a similar degree program at my institution	20.43%	**94**	24.35%	**112**	22.17%	**102**	17.17%	**79**	15.87%	**73**

Note. Placements (out of 460 participants total) were determined by how many had ranked each preference at that particular placement or above, not only by how many students ranked a preference at that specific placement.

Following a similar pattern to the collective rankings in Table 11, the 144 participants who had used only the OWC significantly prioritized “a tutor who has earned degree in English or writing” over all others, followed by “an excellent writer ahead of me in the same or a similar degree program at my institution” then “a tutor I chose myself from all available tutors.” Surprisingly, given the university's Christian distinction, “a tutor who shares the same values I do” was slightly prioritized over “an excellent writer from outside of my institution” as the two final and far less-prioritized choices. The 44 respondents who used only the CS also highly prioritized a tutor with a degree in English or writing but displayed a slightly higher preference for a tutor they chose themselves over “an excellent writer” ahead of them “in the same or similar degree program” at their institution. This slight difference makes sense since the CS allows more of a tutor choice than does the OWC while the OWC tutors are excellent writers who are near the middle or end of their program. Finally, like OWC users, the CS users slightly preferred a tutor with the same values to an excellent writer from outside of the institution. While all students preferred insider knowledge to outsider, the majority of students saw a tutor with a degree in a writing-related field as the best possible choice above all other options, which conflicts with most directors’ inclinations to hire writing tutors with or in degrees across disciplines. That none of these groups prioritized writing tutors with similar values at a university where values are emphasized demonstrates they see a sense of connection as less important when seeking writing assistance, which is consistent with the findings for the next survey question I address.

Analysis of Priority Preferences

In addition to ranking tutor preferences, all participants were also asked to rank how important convenience, connectedness, and academic progress are when choosing writing

assistance. Connectedness was defined on the survey as "collaboration, sense of belonging, relationship," and convenience was defined as "ease of use and fit with schedule." First I compare and contrast OWC users' and CS users' rankings of these priorities to those of all survey participants. Then, in order to pinpoint whether a change in priority influences technological preference, I present the asynchronous and synchronous technology preferences of participants who ranked each of these priorities as "Extremely Important."

Comparison Between OWC and CS Users' Priority Rankings

A comparison of all survey participants' priority rankings to those of OWC-only users and CS-only users reveals that all three groups perceive themselves as prioritizing academic progress over convenience and convenience over connectedness, though CS users clearly prioritize connectedness more highly than do the other two groups. Table 12 shows a similar pattern of prioritization between all survey participants and OWC-only users, though OWC users seemed to prioritize academic progress 3-4 percentage points higher than did all participants collectively. However, the commercial service users prioritized convenience as "Extremely Important" a full 9% higher than both the OWC users and all participants collectively. CS users also prioritized connectedness as "Extremely Important" 5% higher than OWC users did and 8% higher than did all participants collectively.

Table 12

Comparison of Priority Rankings

Important	Extremely		Very		Moderately		Slightly		Not	
All Participants' Rankings (540 Total)										
Connectedness	29.81%	**161**	24.44%	**132**	19.81%	**107**	10.37%	**56**	15.56%	**84**

Academic progress	76.52%	**414**	18.48%	**100**	3.33%	**18**	0.55%	**3**	1.11%	**6**
Convenience	57.04%	**308**	28.15%	**152**	10.74%	**58**	1.11%	**6**	2.96%	**16**
OWC Users' Rankings (168 Total)										
Connectedness	32.74%	**55**	23.81%	**40**	14.88%	**25**	11.90%	**20**	16.67%	**28**
Academic progress	80.47%	**136**	17.16%	**29**	1.18%	**2**	0.59%	**1**	0.59%	**1**
Convenience	57.14%	**96**	30.36%	**51**	10.12%	**17**	0.60%	**1**	1.79%	**3**
Commercial Service Users' Rankings (50 Total)										
Connectedness	38.00%	**19**	24.00%	**12**	18.00%	**9**	4.00%	**2**	16.00%	**8**
Academic progress	78.00%	**39**	18.00%	**9**	4.00%	**2**	0.00%	**0**	0.00%	**0**
Convenience	66.00%	**33**	20.00%	**10**	12.00%	**6**	0.00%	**0**	2.00%	**1**

CS users' higher prioritization of connectedness as compared to OWC users may reflect the more collaborative approach used in the CS's synchronous option, the only option many CS users in this survey had experienced. On the other hand, most OWC users in this survey had experienced only the asynchronous option of a full draft review rather than the OWC's synchronous option. That the prioritization patterns of the all-participant group and the OWC-only group are quite similar may simply reflect their inexperience with synchronous options that foster collaboration and connection. An important point to note, however, is that this question's format did not force participants to rank one priority over the other; consequently, 45.5% of them ranked all three priorities as "Extremely Important" when selecting from writing assistance options.

Technology Preferences by Priority

As one way to address both research questions (Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers? and What are the reasons for these perceptions?), I compared the technological preferences of the groups of students who ranked one priority as "Extremely Important" over the others. Comparing both asynchronous and synchronous preferences of those who prioritize convenience over connectedness, for instance, might have demonstrated a difference in preferred methods of online writing assistance, revealing that priority impacts preference. What it did reveal is that fully online students' technology preferences were remarkably similar, regardless of their priority rankings, with a few slight variations.

Asynchronous preferences by priority. To ascertain participants' perceptions of least and most helpful technological forms of online writing assistance, they ranked "the following asynchronous (non-real-time) options in order of most preferred (1) to least preferred (5) way of receiving writing assistance. The instructions were to "drag and drop to rank options," and the options were as follows:

- Full review of your draft (front comment, summary comment, and comments throughout with 1 day longer wait time
- Partial review of your draft (front comment and comments down part of your paper) with 1-day shorter wait time
- Audio feedback on draft (mp3 or wav file)
- Audio/visual feedback (i.e. screen capture of your draft with recorded feedback)
- Email exchange of questions and replies

While the chart in Figure 10 shows all three groups of participants overwhelmingly preferred a full draft review with one day longer wait time, those who prioritized convenience as "Extremely Important" preferred a partial draft review with shorter wait time 2 to 3 percentage points more than the other two groups. Participants who prioritized academic progress as "Extremely Important" preferred an email exchange 2 to 2 percentage points more than the other two groups, and those who prioritized connectedness as "Extremely Important" preferred audiovisual feedback 2 to 3 percentage points more than the other two groups. Thus, while priorities seemed to have a small effect on preferred methods of asynchronous online writing assistance, the order of preference remains clear. A full draft review with a longer wait, a partial draft review with a shorter wait, and an email exchange are the top three, while audio and audio/visual feedback are the least preferred methods of writing assistance—even for those who prize connectedness as "Extremely Important."

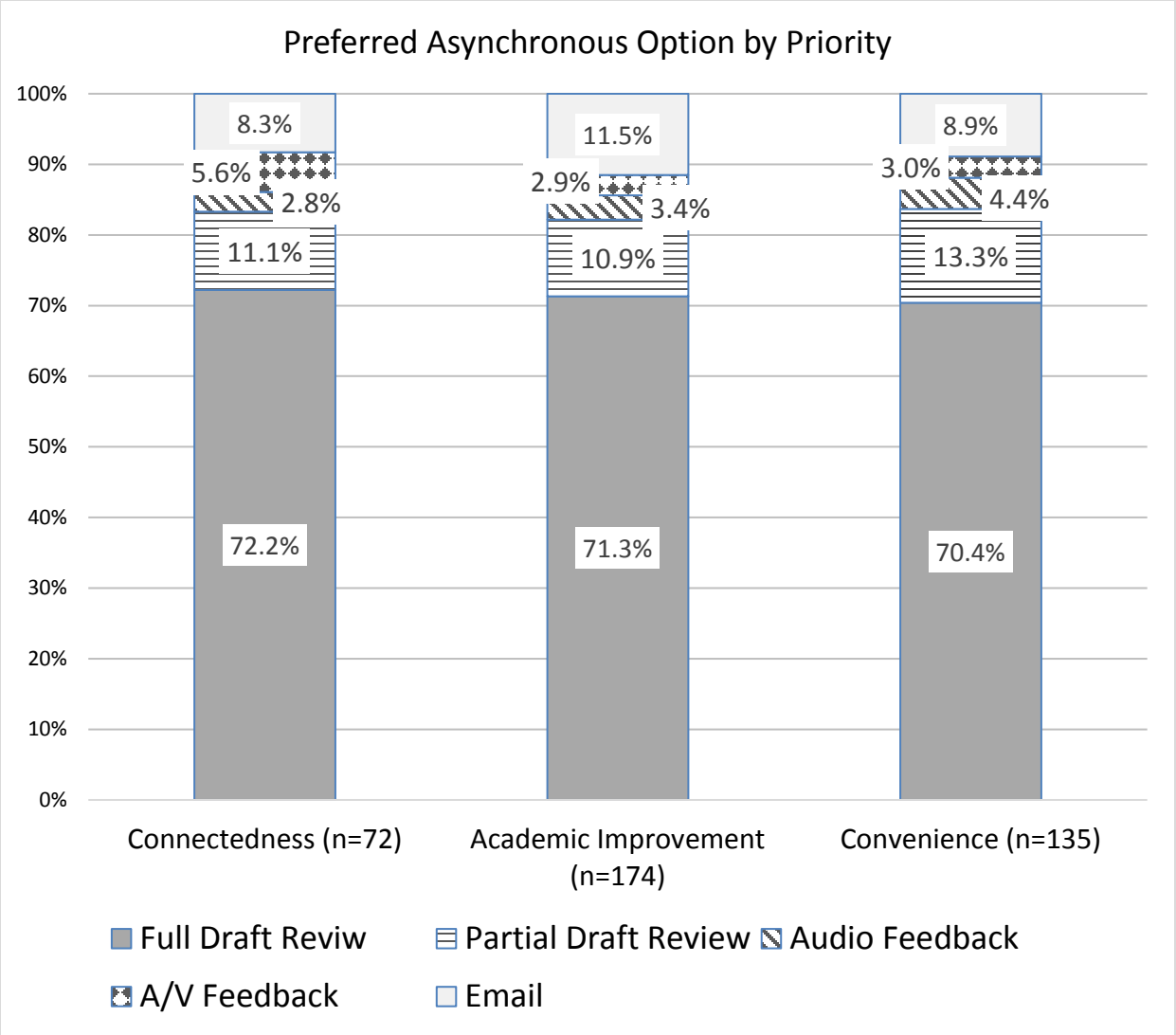

Figure 10. Asynchronous preferences by priority rankings.

Synchronous preferences by priority. In addition to selecting asynchronous preferences, participants also ranked "the following synchronous (real-time) options in order of most preferred (1) to least preferred (7) way of receiving writing assistance. The instructions were to "drag and drop to rank options," and the options were as follows:

- Chat box with shared screen controlled by tutor
- Chat box with shared screen controlled by you

- Video conference with shared screen controlled by tutor
- Video conference with shared screen controlled by you
- Audio call only (phone or Skype, for instance)
- Audio call with shared screen controlled by you
- Audio call with shared screen controlled by you

All three groups who prioritized connectedness, academic progress, and/or convenience as "Extremely Important" preferred a tutor-controlled chat box with screen sharing, a student-controlled chat box with screen sharing, a tutor-controlled video conference with screen sharing, and a tutor-controlled audio call with screen sharing—in that order, though percentages vary (see Figure 11). Those who prioritized academic progress and convenience showed very similar patterns of preference with only slight shifts in percentage points; their order of preferences only slightly shifted when the academic progress group preferred the student-controlled video call over the student-controlled audio call and the convenience group slightly preferred the reverse—perceiving video as less convenient than audio alone.

Participants who valued connectedness showed the highest differences in both percentage points and order of preference from the other two groups. They had a markedly different spread of percentage points, preferring a chat box with screen sharing 73.7% as compared to 62.6% for the academic progress group and 61.4% for the convenience group—a full 11% more than the other two groups. Participants who valued connectedness also showed a slight preference for an audio call with no screen sharing over a student-controlled audio or video call with screen sharing.

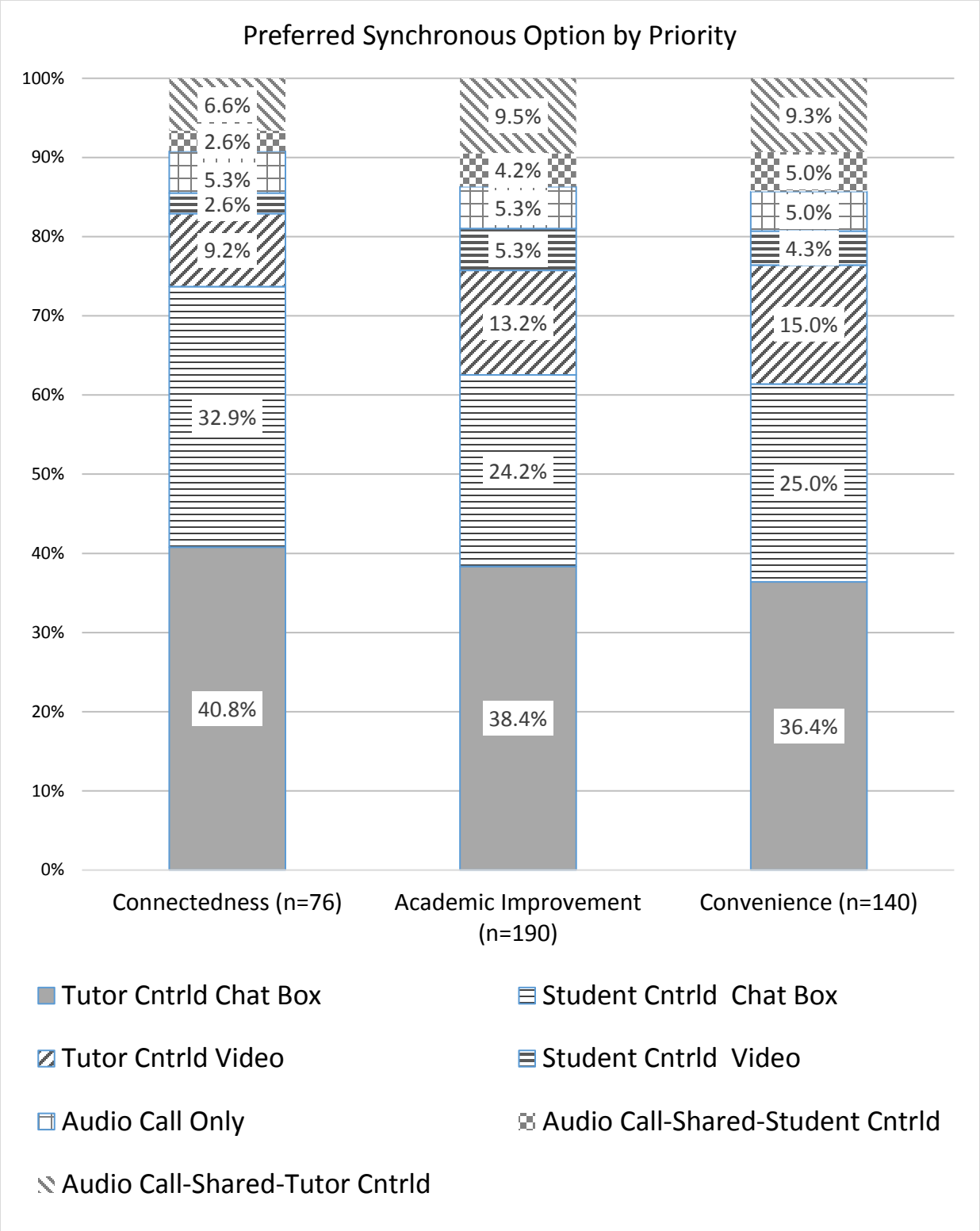

Figure 11. Synchronous preferences by priority rankings.

All three groups of participants by far preferred the tutor-controlled options over the student-controlled counterparts, though the student-controlled chat box option far surpassed the tutor-controlled audio and video options as preferences. Thus, the overall order of preference for synchronous options remained consistent among all three groups: tutor-controlled chat with screen sharing, then student-controlled chat with screen sharing, followed by tutor-controlled audio and video. Yet valuing connectedness significantly influenced the percentage points spread between options—quite a revealing finding.

Analysis of Academic Goal Preferences

Beyond ranking their priorities when choosing writing assistance, all participants were also asked to identify their academic goals when choosing writing assistance, in order to distinguish between those with short-term improvement goals versus long-term. The survey asked participants to rate their agreement with the following two statements using a Likert scale of 1-4 with strongly agree, somewhat agree, somewhat disagree, and strongly disagree:

- The main reason I may seek writing assistance is to help me improve my writing skills permanently
- The main reason I may seek writing assistance is to help me get a higher grade on my paper and in the class.

First, I compare and contrast OWC users' and CS users' rankings of these academic goals to those of all survey participants. Then, in order to pinpoint whether a difference in academic goals influences technological preference, I present the asynchronous and synchronous preferences of participants who selected "Strongly Agree" for only one of these goals as compared to the preferences of those who selected "Strongly Agree" for both goals.

Comparison Between OWC and CS Users' Academic Goal Ratings

A comparison of all survey participants' academic goals to those of OWC-only users and CS-only users reveals that all three groups perceived themselves as prioritizing short-term grade improvement over long-term skill improvement, though a lower percentage of CS users valued long-term improvement than did OWC users or all participants collectively (see Table 13). An important point to note, however, is that this question's format did not force participants to prefer one goal to the other; consequently, 92% of them selected "Strongly Agree," fully valuing both academic goals when seeking writing assistance.

Table 13

Comparison of Academic Goal Ratings

I may seek writing assistance	**Strongly Agree**		**Somewhat Agree**		**Somewhat Disagree**		**Strongly Disagree**		**Total**
OWC Users' Academic Goal Ratings									
to improve my writing skills	70.52%	**366**	24.86%	**129**	3.08%	**16**	1.54%	**8**	519
to get a higher grade	71.24%	**374**	24.00%	**126**	2.86%	**15**	1.90%	**10**	525
OWC Users' Academic Goal Ratings									
to improve my writing skills	73.81%	**124**	22.62%	**38**	2.98%	**5**	0.60%	**1**	168
to get a higher grade	78.70%	**133**	18.34%	**31**	1.78%	**3**	1.18%	**2**	169
CS Users' Academic Goal Ratings									
to improve my writing skills	69.39%	**34**	20.41%	**10**	6.12%	**3**	4.08%	**2**	49
to get a higher grade	74.00%	**37**	20.00%	**10**	2.00%	**1**	4.00%	**2**	50

Combining and rounding off each group's "Strongly Agree" and "Somewhat Agree" ratings, 90% of CS users responses indicated they seek assistance for long-term improvement

versus 96% for short-term, as compared to 94% of OWC users who desire long-term improvement versus 97% for short-term. In contrast to the 6% gap between CS users' goals and the 3% gap between OWC users' goals, 95% of all participants desire both long and short-term improvement. A significantly higher percentage of CS users have short-term goals than long-term goals as compared to the other two groups, though all are at or above a combined agreement of 90%. That fewer CS users have long-term goals than OWC users would seem to make sense, as using the OWC requires more forethought and planning while the CS allows round-the-clock access, seemingly more conducive to short-term goals. Yet participants' asynchronous and synchronous technology preferences, when filtered by academic goals, produced intriguing results.in

Technology Preferences by Academic Goals

As with participants' priorities, I compared the technological preferences of the groups of students who ranked one academic goal (either short-term or long-term) as "Extremely Important" over the other in order to address both research questions:

- Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers?
- What are the reasons for these perceptions?

I used the same two "drag and drop" technology ranking questions outlined above that ask students to rank their asynchronous and then synchronous preferences for receiving writing assistance. Though only 8% of participants who ranked their technological preferences had stronger short or long-term goals, filtered results showed that academic goals did clearly influence their preferences, in perhaps unexpected ways.

Asynchronous preferences by academic goal. Participants' options for asynchronous technology were as follows:

- Full review of your draft (front comment, summary comment, and comments throughout with 1 day longer wait time
- Partial review of your draft (front comment and comments down part of your paper) with 1-day shorter wait time
- Audio feedback on draft (mp3 or wav file)
- Audio/visual feedback (i.e. screen capture of your draft with recorded feedback)
- Email exchange of questions and replies

As shown in Figure 12, a significant majority of all three groups preferred the full draft review (with one day longer wait time) over all options, but those who valued the short-term goal of a better paper or class grade preferred an "email exchange of questions and replies" over the three remaining options, including a partial draft review and audio/visual feedback. In contrast, those who valued the long-term goal of improved writing skills preferred the audio/visual feedback to an email exchange. Taken together, both groups' responses reveal their perceptions of which technology might foster long-term learning and which might provide specific answers to help "fix" their papers. The much larger group of participants who equally valued short-term and long-term goals preferred a partial draft review and email exchange second to a full draft review, with audio feedback a distant fourth and audio/visual feedback nearly non-existent. That all three groups perceived a full draft review as the most helpful, regardless of their academic goals and despite the one-day longer turnaround time, is indisputable and unsurprising. However, the short-term groups' preference for an email exchange over the remaining options and the long-term groups' omission of it reveal a perception of its lack of usefulness for long-term learning.

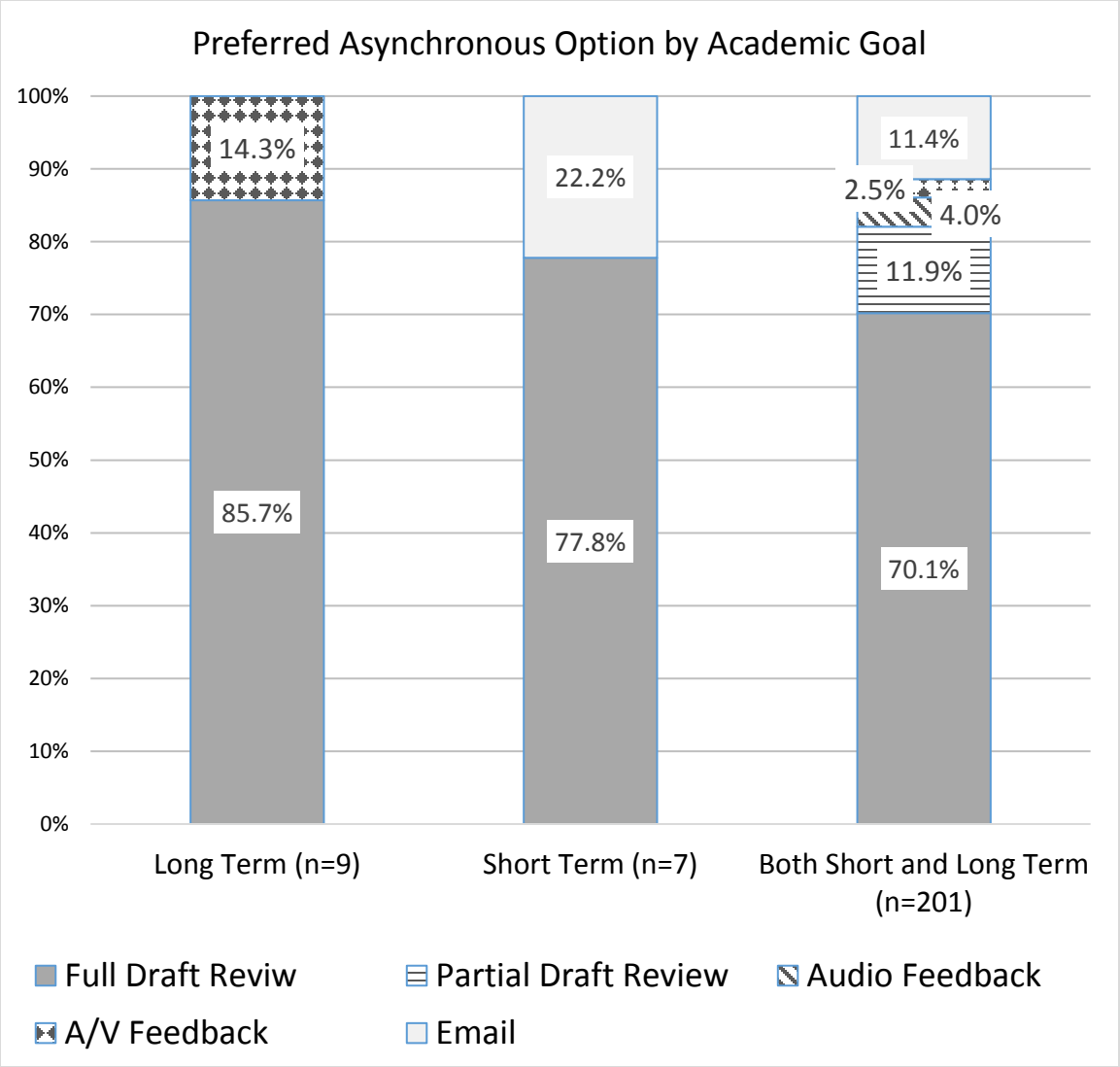

Figure 12. Asynchronous preferences by academic goal.

Synchronous preferences by academic goal. The synchronous results were equally enlightening. As a reminder, participants' options for synchronous technology were as follows:

- Chat box with shared screen controlled by tutor
- Chat box with shared screen controlled by you
- Video conference with shared screen controlled by tutor
- Video conference with shared screen controlled by you
- Audio call only (phone or Skype, for instance)

- Audio call with shared screen controlled by you
- Audio call with shared screen controlled by you

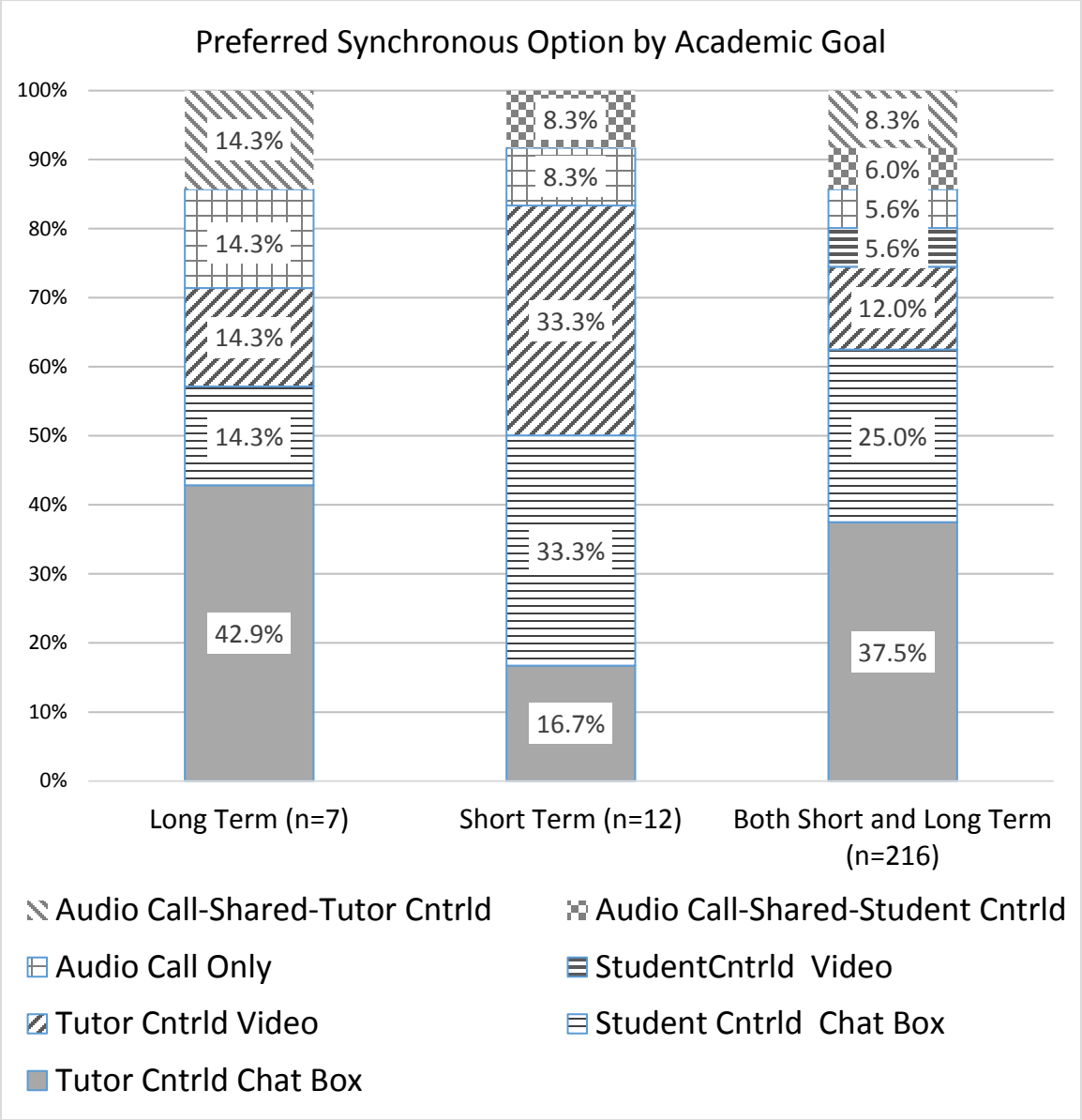

Figure 13. Synchronous Preferences by Academic Goal.

The synchronous results filtered by academic goals (Figure 13) paint a picture of participant perceptions regarding student versus tutor control. Again, as with preferences filtered by priority, all three groups strongly preferred the chat box options, whether tutor or student-

controlled. However, those who valued short-term over long-term academic goals much preferred the student-controlled screen sharing with chat box to the tutor-controlled, and vice versa for those who valued long-term academic goals over short-term. Further, though both the short-term and long-term groups preferred four of the same options to varying degrees, the short-term group's final preferred option was student-controlled screen sharing with audio versus the long-term group's preferred option for tutor-controlled screen sharing with audio. The short-term group's preference for student control was tempered only by their equal preference for the student-controlled screen sharing with chat box and the tutor-controlled screen sharing with video, the only tutor-controlled option included in their preferences.

In contrast, the long-term group preferred tutor-controlled options at 71.5% whereas the short-term group preferred tutor-controlled options at only 50%. The largest group of participants by far, those who valued both short-term and long-term academic goals equally, preferred tutor-controlled options at 57.8%. However, given the small sample size of the other two participant groups and the likelihood that most students do not truly prioritize short-term and long-term academic goals equally when choosing writing assistance, a survey that forced participants to rank one academic goal over the other would yield more accurate results. Yet this survey does at least raise the possibility that students' short-term versus long-term academic goals do influence their asynchronous and synchronous technological preferences for receiving writing assistance. Based on their academic goals, they likely do perceive certain technology as more or less helpful for achieving those goals.

Comparison of Participants' Perceptions of Both Services' Options

As described in Chapter Three, both the homegrown Online Writing Center and the commercial service in this study have asynchronous and synchronous services with different

tutor credentials, technology, pedagogy, limitations, and other variables. Thus, in another attempt to discover which features participants found the least and most helpful, I compared participants' perceptions of each service's asynchronous option and then conducted a similar comparison between their perceptions of each synchronous option. I first compared how many times participants have used each service—though repeat usage could indicate that participants either find the service helpful for permanently improving their writing skills or useful for fixing their papers. Unfortunately, the way this survey was constructed does not allow for filtering frequency of use by academic goals. Still, comparing frequency of use indicates student perceptions of helpfulness, regardless of how that they define helpfulness. Second, I compared participants' perceptions of OWI best practices as each service's asynchronous and synchronous tutors followed them (or did not). The comparison of perceptions concluded with two mutually exclusive statements about how much the service either contributed to or hindered their growth as academic writers.

Comparison of Participants' Asynchronous Option Perceptions

As previously described, the Online Writing Center provides a full draft review, once per assignment, in which tutors should, according to their training, comment on patterns of error by identifying and explaining them, providing examples of similar errors and how to fix the incorrect examples, and linking to resources for further explanation and study of identified errors. OWC tutors were also trained to conclude with a summary of strengths, areas for improvement, and next steps. The commercial service also provides a draft review, which may or may not be completed due to time and word limits. The CS's pedagogical approach to the draft review is similar, though CS tutors tend to focus solely on what the student wants help with, ignoring other issues in each paper due to time constraints. I here present participants' frequency

of use and perceptions of OWI best practices for both the OWC's and CS's draft review options. A comparison between the two draft review options showed participants found both services helpful, though the commercial service was rated slightly higher in most areas of comparison.

Asynchronous frequency of use comparison. Prior to rating each service on OWI best practices, participants were asked "How many times have you used [X service]?" Their options are shown in Table 14. The sample size of those who used the CS's draft review service is two-thirds smaller than the sample size of those who used the OWC's draft review service, but nearly 10% more CS users than OWC users "visited" that draft review service more than once, and much higher percentages of CS users "visited" 6-10 times and over 11 times.

Table 14

Frequency of Use Draft Review Comparison

OWC Draft Review Frequency of Use	**%**	**Count**
only once	36.09	61
2-5 times	49.70	84
6-10 times	8.88	15
11 or more times	5.33	9
Total	100	169
CS Draft Review Frequency of Use	**%**	**Count**
only once	26.53	13
2-5 times	34.69	17
6-10 times	22.45	11
11 or more times	16.33	8
Total	100%	49

Many possible variables could factor into CS users' higher frequency of use: the service's faster turnaround rate, its time and word limits, its sole focus on student-indicated needs, or perhaps less permanent learning taking place. It might also be a combination of those factors in addition

to others. Thus, frequency of use for fully online students would be a good area for future study. What is clear from this survey is that the majority of both sets of users perceived their selected draft review service as helpful enough to return more than once.

Asynchronous OWI best practices comparison. To ascertain how well participants' perceived each asynchronous service's incorporation of OWI best practices and their facilitation or hindrance of growth in writing skills, participants were asked to rate their agreement with the following 12 statements, with 5 and 12 being mutually exclusive:

1. My tutor's comments were easy to understand.
2. My tutor identified my grammatical and stylistic patterns of error.
3. My tutor clearly communicated helpful explanations, examples, and resources.
4. My tutor offered guidance on my development of ideas and the flow of my paper.
5. This experience contributed to my growth as an academic writer.
6. My tutor's comments/questions encouraged critical thinking about my topic.
7. My tutor offered clear guidance about potential next steps I should take to improve my writing.
8. I could easily communicate my writing needs to my tutor.
9. My tutor summarized my writing strengths and weaknesses.
10. I felt like I collaborated with my tutor on my paper.
11. I felt a sense of connection with my tutor.
12. This experience hindered my growth as an academic writer.

Participants rated these statements on a 4-point Likert scale with these options: "4-Strongly agree," "3-Somewhat agree," "2-Somewhat disagree," and "1-Strongly disagree." Figure 14

compares the commercial service's point averages for each response to the OWC's point averages, using the above numbered statements as the chart's key.

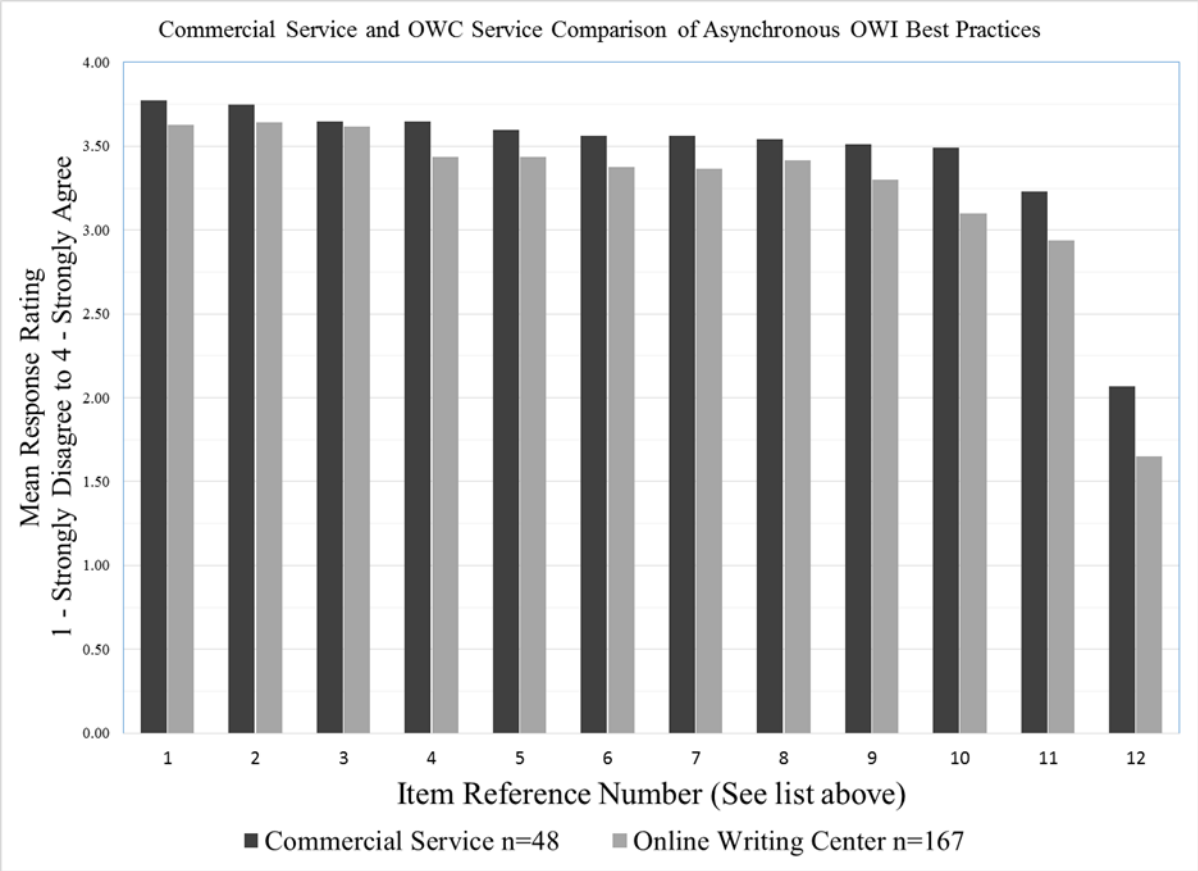

Figure 14. Comparison of asynchronous OWI best practices.

As seen in Figure 14, participants on average rated both asynchronous services between 3 and 4 points on every item, with the exception of questions 11 and 12. The OWC only falls slightly below to a 2.94 average for the statement, "I felt a sense of connection with my tutor" in comparison to a 3.23 average by CS users for that same statement. However, this pattern appears the same on all items: CS users rated its draft review service slightly higher than OWC users rated its draft review service. The second largest difference between ratings occurs for statement

10: “I felt like I collaborated with my tutor on my paper.” The difference of .39 points may reflect the already established fact that CS users value collaboration more highly and seek it more actively than do OWC users. However, the biggest difference between ratings (.42) occurs for statement 12, the one time the OWC rating bests the CS rating: “This experience hindered my growth as an academic writer.” The lower the rating the better for this single statement. One might expect CS users to disagree more strongly that the experience hindered their growth as writers than might OWC users, since CS users consistently rated the CS more highly on OWI best practices than do OWC users. The seeming discrepancy could indicate that some CS users might have continued selecting the same answers all the way down the line without thoroughly reading the questions. Still, both sets of users do perceive the OWI best practices at work in both venues (items 1-9) and both groups perceive those practices as contributing to their growth as writers (item 5).

Comparison of Participants’ Synchronous Option Perceptions

The OWC offers a synchronous option designed to recreate a face-to-face meeting as much as possible, using Skype’s video and screen sharing feature to allow visual and verbal discussion of a given draft. However, students are required to make an appointment, and the form defaults to two days after the current day—no sooner. For instance, the first hour a student has access to when making an appointment at 11:55 PM tonight is 8:00 AM the day after tomorrow. The necessity of an appointment made ahead of time seems to discourage frequent use. OWC users are also responsible to record if they like or take notes if they like. The commercial service, in contrast, allows round-the-clock synchronous access to writing tutors through a chat box with screen sharing platform. The only time limitation is the 20 hours per semester the university allots each student to use the commercial service. Since typing back and

forth takes more time than talking, students tend to use their time quickly. The CS platform records each student's session and provides a transcript of it. I here present participants' frequency of use and perceptions of OWI best practices for both the OWC's and CS's synchronous options. Again, participants find both services helpful, though the commercial service appears to have slightly higher positive ratings in most areas of comparison and much higher frequency of repeat usage.

Synchronous frequency of use comparison. In contrast to the frequency of use tables for the asynchronous services, the two-thirds smaller sample size is those who used the OWC's Skype service rather than those who used the CS's chat service, but CS users still "visited" the synchronous service repeatedly at a much higher percentage than did OWC users.

Table 15

Frequency of Use Skype/Chat Comparison

OWC Frequency of Use	**%**	**Count**
only once	63.16	12
2-5 times	26.32	5
6-10 times	5.26	1
11 or more times	5.26	1
Total	100	19

CS Frequency of Use	**%**	**Count**
only once	24.07	13
2-5 times	42.59	23
6-10 times	14.81	8
11 or more times	18.52	10
Total	100	54

Many possible variables could factor into OWC users' much lower frequency of use: the requirement to make appointments ahead of time, the lack of physical privacy with video use, the

lack of a permanent written record, or other reasons. What is clear from this survey is that the majority of CS users perceived their selected service as helpful enough to return more than once while the majority of OWC users did not.

Synchronous OWI best practices comparison. To ascertain how well participants' perceived each synchronous service's incorporation of OWI best practices and their facilitation or hindrance of writing improvement, participants were asked to rate their agreement with the following 14 statements, 9 and 14 being mutually exclusive:

1. More time was spent on discussing my writing needs than on learning to use the technology.
2. My tutor stayed focused on my expressed writing needs.
3. My tutor offered clear guidance about potential next steps I should take to improve my writing.
4. My tutor clearly communicated helpful explanations, examples, and resources.
5. My tutor made notes or changes to my work during the session.
6. I made notes on or changes to my work during the session.
7. My tutor's comments/questions encouraged critical thinking about my topic.
8. My tutor accurately interpreted my writing needs.
9. This experience contributed to my growth as an academic writer.
10. I returned to the transcript or summary of the session to help me make revisions.
11. I adjusted easily to the technology.
12. I felt like I collaborated with my tutor on my paper.
13. I felt a sense of personal connection with my tutor.
14. This experience hindered my growth as an academic writer.

Participants rated these statements on the same 4-point Likert scale as the asynchronous ratings, from “Strongly agree” to “Strongly disagree.” Figure 15 compares the commercial service’s point averages for each response to the OWC’s point averages, using the above numbered statements as the chart’s key.

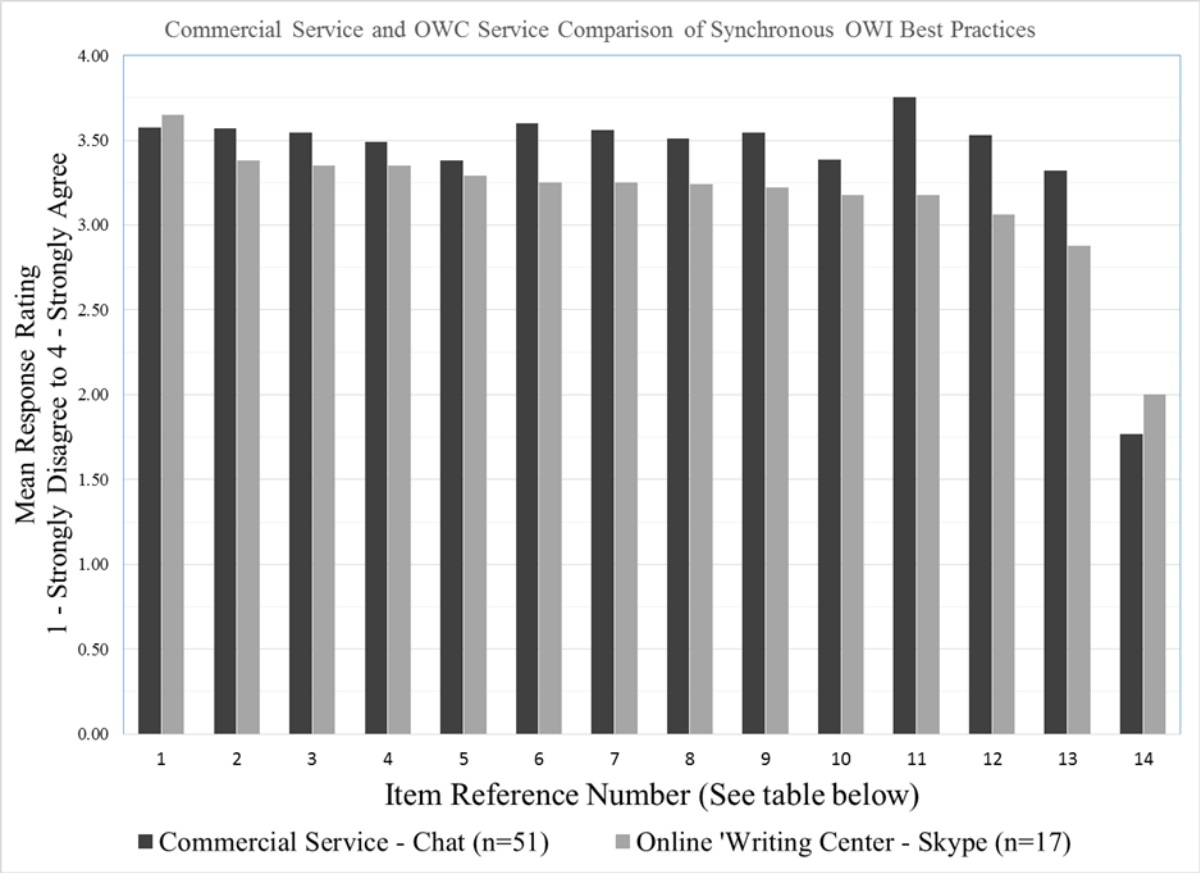

Figure 15. Comparison of synchronous OWI best practices.

As with the asynchronous chart, Figure 15 shows that participants on average rated both synchronous services between 3 and 4 points on every item, with the exception of item 13, the same one on which the OWC fell short in the asynchronous data: “I felt a sense of personal connection with my tutor” earned a 2.88 rating where it earned a 2.94 for asynchronous. Further, participant ratings of items 11, 12, and 13 show the largest gaps between CS users and OWC

users, with CS users giving the higher rating all three times. “I adjusted easily to the technology” (item 11), “I felt like I collaborated with my tutor on my paper” (item 12), and “I felt a sense of personal connection with my tutor” (item 13), averaged rating differences of .57, .47, and .44 respectively. Thus, the closest simulation of face-to-face tutoring—video conferencing with screen sharing—does not necessarily create student perceptions of connection or collaboration. Still, both sets of users do perceive the OWC best practices (items 1-12) at work in both venues and both groups perceive those practices as contributing to their growth as writers (item 9).

Chapter Summary

In this chapter, I have shared the survey data that most closely focuses on which features or services online students prefer and why they prefer them. The following sums up the most significant results:

- Participants’ top five reasons for not using either or both services included lack of time, lack of awareness, perceived difficulty of the process, satisfaction with their current service, and satisfaction with their own writing skills.
- A much higher percentage of CS users than OWC users had short-term goals in seeking writing assistance.
- Users of both services ranked academic progress as highest priority and connectedness as lowest, but CS users ranked convenience and connectedness several percentage points higher than OWC users.
- The most-preferred synchronous tutoring was a tutor-controlled chat with screen sharing. Those with a connectedness priority preferred this option at a much higher percentage than those with differing priorities. Short-term goal users preferred student control in synchronous tutoring while long-term goal users preferred tutor control.

- The most-preferred asynchronous tutoring was a full draft review with a longer turnaround time, with a partial review and a shorter wait time as the next most preferred. On asynchronous preferences, users with various priorities differed by only a couple percentage points. Short-term goal users preferred email exchanges as a better option than audio/visual whereas long-term goal users preferred audio/visual assistance above email exchanges.
- Both groups of users preferred tutors with degrees in English and/or writing above tutors they chose themselves or tutors with similar values or experience.
- Both groups of users rated their services highly on whether the tutors followed online writing instruction best practices, but CS users rated that service slightly higher than OWC users rated the OWC.

In the following chapter, the reasons for some of these preferences become clear as I present all 13 interview participants as individual case profiles, creating a robust description of their experiences with their selected services and the resulting growth or lack of growth in their writing skills.

CHAPTER FIVE

PARTICIPANT PROFILES

The email interview responses helped create participant profiles and provided the foundation for cross-case syntheses to help answer the research questions: Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers and what are the reasons for these perceptions? The following participant profiles provide some answers to both questions, giving a complete descriptive picture of each participant's perceptions of their tutoring experiences in their own words and writing as much as possible, errors and all. Following these profiles, the four cross-case syntheses in Chapter Six then provide a service-by-service response to the first research question, giving scholars and OWC directors a holistic view of online students' perceptions of each service's features.

The 13 interview participants included five males and eight females, six graduate students and seven undergraduates, five over the age of 50 and seven under it (ages ranging from 20 to 61), one English language learner (ELL), one student with a disability, two straight-A students, and one student on academic probation. This purposeful selection allowed input from online students of diverse backgrounds and abilities in order to more fully explore possible answers to my study's second question: "What are the reasons for these perceptions?

Background

The 13 interview participants responded to this offer at the end of the survey:

> A small number of participants are needed for follow-up email interviews. Indicate your willingness below and, if contacted, earn $50 by completing these steps:
>
> 1. Select "Yes" below and provide your email address.

2. Look for an email entitled “Writing Assistance Interview.”
3. Answer in detail two sets of 10 emailed questions about your tutoring experiences.
4. Receive a $50 Visa Gift Card and thank you in the mail.

They knew from the start that participation would require work but they would be compensated for their time, making their motive for volunteering unlikely to be anything other than the chance to earn $50 for a total of 2-3 hours of work or less. The note above the first set of interview questions instructed participants thusly: “Please convey all perceptions and feelings about your tutoring experience(s) using thorough and expressive description.” It also required that they answer each question once for each service if they had used more than one service: “If you have had multiple experiences with multiple services, do your best to describe the things that stand out to you about your experience with each type of service.” In order to solicit their experiences with all aspects of convenience, connectedness, and academic improvement, the interview framework was as follows:

- Pre-session related questions (motivation, accessibility, usability)
- Session related questions (technology functionality, communication, collaboration, assistance requested vs. received)
- Post-session related questions (feedback followed or ignored, overall level of satisfaction, contribution to growth in writing skills)

Participant profiles are grouped below by choice of service for an easier comparison of experiences. Each profile includes a brief description of the participant’s demographics and usage statistics for his or her chosen service(s) then summarizes his or her experiences as shared in written responses within the abovementioned interview framework.

OWC-Only Users

Five participants had not used the commercial service at all and had used one or both of the OWC services: the asynchronous draft review or the synchronous Skype appointment. All had used their selected options more than once, ranging from only twice to 54 times.

Samuel

A 28-year old senior majoring in psychology, Samuel was a straight-A student at the time of the interview. He had started his current degree at this university in fall of 2009, but transferred in credits from three different schools he also attended locally in 2012, 2014, and 2015. Samuel used the OWC draft review service seven times since fall of 2015 and had emailed the OWC four times with various APA formatting questions. Given that his expressed writing needs were solely focused on learning APA format, priorities as ranked on the survey seemed sensible. He ranked convenience highest, academic improvement next, and connectedness lowest, and he ranked paper improvement a higher priority than long-term improvement. “It was my hope to double check for APA formatting errors and ensure that my writing met the assignment’s criteria. In the past, points have been deducted from my work for minor APA errors and I doubt my own ability to properly format an APA paper” (Samuel, R1i, p. 2).

With this goal in mind, Samuel sought assistance by calling the university library and found out about the OWC draft review service from the receptionist. At first, he had difficulty accessing the writing center links (too many clicks to get to assistance), and had trouble locating the tutoring request link on the main page. But once he did, he noted, “. . . the emails and retrieval process presented no trouble for me. That portion of the process has always gone smoothly” (Samuel, R2i, p. 3). He also was not aware of the OWC app (widget) on his login page and was glad to learn about its existence when I asked in round two.

Samuel's session experience itself, or draft reviews in this case, seemed to provide the assistance he sought:

> The tutors I have worked with generally provide all of the information I asked for. Specifically, APA formatting, minor grammar instruction, general thoughts and opinions on my writing, as well as incidental observations (One tutor shared a personal anecdote on the paper's subject matter). I enjoyed his anecdote. His comment style was different from the other tutors. He seemed more willing to actively critique my writing style, which was at first off putting but I appreciate the feedback and constructive criticism. (Samuel, R1i, p. 3).

Samuel did not seem to see this interaction as collaborative, though—perhaps since connectedness was his lowest priority.

> [I] believe the comments lends itself to communication, as much as it can without a back and forth. The only way to improve communication would be to include a follow-up Skype or text option. For instance, being able to send a message to the tutor asking to clarify one of their comments. (Samuel, R2i, p. 3).

He was apparently unaware that the OWC does offer a follow-up Skype or email option, though not necessarily with the same tutor.

Post-session, Samuel always followed his tutors' advice, with one exception: "Once I receive my reviewed draft, I read through their comments, making alterations to the text as needed. Apart from a single instance where the tutor advised adding a paragraph to a paper, I have followed the tutors' advice" (Samuel, R1i, p. 4). He appears to have kept APA improvement as his sole focus since he addresses that goal once again when expressing his level of satisfaction. He felt more confident about APA but did not feel like he could write a perfect

APA paper yet because he still loses very minor points for APA: “Without exhaustive feedback, I do not feel like I have learned everything I need to know because my next paper is just as likely to contain some error” ((Samuel, R2i, p. 4).

When asked about why he had never tried the commercial service, Samuel brought up the Christian aspect of his university and courses in addition to his sole need for APA assistance:

> I assumed that the service operated like a chat help service and have not tried the service because the classes I am taking do not present an obstacle in terms of comprehension but rather formatting and style. I did not know that they review paper drafts, although I am uncertain of how effective their feedback would be for the Christian elements of [the university]’s assignments. (Samuel, R2i, p. 1).

Even though his focus was APA assistance rather than content assistance, he hesitated to consider the CS because of its tutors’ potential lack of biblical knowledge and Christian principles.

Overall, once Samuel figured out where to access the OWC, his experience was positive. Seeing little need for collaboration, he received the assistance he wanted and continued to use the service to hone his APA skills. His one criticism was having to click too many times for access. His one suggestion was to have two options for turnaround time: more in-depth feedback with the longer wait time and more selective feedback with a shorter wait time.

Lydia

The one participant who was on academic probation, Lydia was a 55-year-old graduate student pursuing a Master’s in Human Services, Counseling at the time of the interview. She began this current degree in summer of 2014 and transferred in no credits. She went on academic warning after her first semester and on academic probation after fall 2014, but her grades

improved significantly by spring 2015, likely because Lydia used the OWC draft review service 41 times between summer of 2014 and the time of this study. In that time frame, she emailed the OWC four times, concerning only the status of drafts in progress. Lydia learned about the OWC because her instructors used the early warning system within Blackboard:

> I received an email from the writing center informing me that one or more of my instructors believed that I could benefit from the writing center. In the beginning I felt forced having to submit all my papers, and then I just got use to submitting the papers to correct the errors recommended from the writing center. (Lydia, R2i, p. 1)

Though on the survey she ranked all goals/priorities equally as "very important," her pre-session writing needs as expressed in the interview seemed to be primarily grammar assistance: "The results that I was looking to achieve was not to keep writing run-on sentences and fragmented sentences in completing my assignments" (Lydia, R1i, p. 1-2). She added that she sought help for "mainly grammar, revising suggestions, introductions and conclusions" (Lydia, R1i, p. 2). Lydia's initial and continued perceptions of the OWC's convenience features were overwhelmingly positive with no complaints offered: "The level of comfort was great and the website was nice as well. The timeliness was sufficient and worked well with my schedule. The writing center tutoring service was easy to use and people friendly" (Lydia, R1i, p. 2).

She praised her session experiences (41 in total) as addressing her writing needs and more, though her answer seemed focused on improving each paper for a better grade rather than long-term improvement of writing skills:

> The type of help I received was my papers being improved when I turned them in through the writing center and a passing grade. Writing needs were run-on sentences and fragmented sentences. The help of the writing center did help me with these errors. Yes,

> they pointed out things I was not aware of such as grammar errors, comma that were not needed in some cases within the paper. Reference errors in a few cases too. They helped with everything I needed help with and sometimes more feedback to correct the same consistence patterns throughout the paper. (Lydia, R2i, p. 2-3)

As to her sense of collaboration or connection regarding these exchanges, Lydia presented a mixed-bag of sorts, stating she "felt connected on some occasions and disconnected on others when the communication appears critical" but then brushed off the disconnections, essentially noting that was to be expected: "This happens with the communication that comes from distance learning communicating online" (Lydia, R2i, p. 3). She agreed that many of her tutors communicated with her respectfully and let her know she could ask for a real-time appointment as a follow-up option. She concluded her thoughts thusly: "They were encouraging and did on some instances connect through their words" (Lydia, R2i, p. 3).

When questioned about her post-session practices, Lydia revealed her perception of the tutors as authoritative experts:

> The revision process was good sometimes and I followed the instructions to the exact formatting that was requested to be revised. There was never a time I ignored anything because I believed they were the experts since it was requested to use through [the university] facilitators. I always fixed my papers according to what is recommended and they are kind of straightforward with what needs to be corrected with examples. Never skip a suggestion or instruction, and yes I basically understand each comment. (Lydia, R2i, p. 3-4)

Clearly, Lydia saw the OWC as almost a mandate and the lifeline she needed to pull her out of the academic probation current in which she felt trapped. She wanted to improve enough to earn

her degree and thus followed her instructors' suggestion to use the OWC and took the tutors' instruction, explanations, and examples as gospel. She asserted, "The tutoring experience help me to pass my classes and I am very satisfied with the results I received overall. I believe I have improved in my writing skills, and yes I can write on a graduate level on my own now" (Lydia, R2i, p. 4) She had no knowledge of the CS and her access to it.

Leslie

A 57-year old male Master's in Accounting student who earned primarily As and Bs, Leslie embodied that student with a very focused reason for seeking assistance and no need to continue once that need was met. He began his degree in fall of 2015 and submitted only two drafts to the OWC that semester. The first time was just to see what kind of feedback he received, and the second to received APA assistance:

> I saw the tutoring service on the [university] website where I sign into my online courses. My grade on my first paper was not as high as I wanted so I decided to submit a paper to the writing center as a trial run. (Leslie, R1i, p. 1)

He admitted, "It has been a while since returning to school and the APA formatting that I was required to use was a weakness. I used the APA guide for my first paper, but still had some deficiencies in that area" (Leslie, R1i, p. 1-2). Given this focus, it is not surprising that Leslie's survey response prioritized an improved grade over improved writing skills and ranked academic improvement higher than convenience and convenience as higher than connectedness.

Addressing the OWC convenience features and his pre-session experience, Leslie admitted he was not technologically savvy nor comfortable with real-time communication, which made the OWC the best option for him:

> It took me a few minutes to navigate the website and submit my first paper. I am an older student and may not be as computer literate as younger students. I found it convenient to submit my paper and wait for the response. I was very comfortable with the service during my second use of it. I did not hesitate to use it when I felt I needed help and knew the process and what to expect. The OWC form was straightforward and I did not have any issues with it. I felt I could communicate my issues well and would get a response back through email. I can express myself better through email than phone or chat as I am able to channel my thoughts better. I have no suggestions for improving it. (Leslie, R2i, p. 2)

Apparently, Leslie's schedule could accommodate the lengthier turnaround time, and more importantly, the process fit his level of comfort more than the other types of technology.

Leslie was well satisfied with what occurred during both his draft reviews, providing details about the tutor feedback that clarified his approval. He writes of his first session:

> I received my paper back quicker than what was promised. He had used an editing feature to highlight various areas on then he commented on items. Based on my directions, I expected that only the APA portion would be addressed. I was delighted that he had reviewed my whole paper and left me many worthwhile observations to consider. He also provided that APA guidance that I needed which helped me greatly. (Leslie, R1i, p. 3)

Leslie found his second session even more praiseworthy:

> The assistance I received was better than my first experience. I was satisfied with the first reviewer, but [this tutor] was more thorough. The one aspect that was real special was that she provided APA reference notes I with her comments so that I could further

> research a comment using the APA formatting guide and some other online references through links. She also used the highlighter aspect in technology to shade problem areas and provided quality editing comments in the margin. (Leslie, R1i, p. 3)

Still, Leslie did not view what occurred as collaboration because it was a one-time communication on both ends, but he stated that he "did not want or expect a collaborative effort and looked for guidance on presentation aspects." He did, however, feel a sense of connection:

> When [the first tutor] was first assigned to my paper he introduced himself and spelled out exactly what he was going to do and what he was not going to do (edit the paper). I like the personal touch as I felt I was connecting person-to-person rather than with a department of the university. Like [the first tutor], [the second tutor] introduced herself and she identified the tutoring policies she would follow. She evoked confidence in her writing, but also conveyed a caring persona which felt like she was helping as a trusted friend and not as a job. (Leslie, R1i, p. 4)

Clearly, Leslie's perceptions of his two sessions were that they exceeded his expectations. Leslie's post-session practices reveal his discernment and ability to think critically about tutor feedback and whether to apply it. His first submission to the OWC was a trial run and was not returned in time for him to make the changes, but he said he would have made all recommended changes, except for a content issue where the tutor's lack of expertise about the subject matter was apparent. About the second session, Leslie commented:

> I was able to apply many of the comments as I completed my final paper. I had some formatting issues that were identified and I corrected along with some typo type of errors in my bibliography. I had also used a combination reference by including the 'DOI reference' with a "retrieved by" database format which was redundant that I was able to

> correct. [The tutor] provided good advice to improve my content and formatting. I agreed with some of her observations and rewrote several paragraphs providing additional support as recommended. This project was part of a larger business plan project so I had the opportunity to reflect on it for many days before I had to complete submit the final report. (Leslie, R2i, p. 5)

Overall, Leslie was highly pleased with his experience with all the OWC features. His final comment summarized his approval: "I was very satisfied with the writing assistance received. It helped me understand APA formatting and provided additional suggestions to improve my writing beyond what I expected. Bonus!" (Leslie, R1i, p. 5). When asked about the CS, Leslie did not mention his preference for asynchronous communication over synchronous, but rather referred to his initial impression of the website:

> [The CS] had every appearance of an outside business. I saw k12 in a heading and thought it may not be for graduate level work. Also, when I looked through the subjects it had English and Math, but no business courses so I felt it was a generic site and probably not worth my effort to pursue. (Leslie, R2i, p. 2)

Even though he ranked connectedness as his lowest priority, Leslie was turned off by the lack of connection he felt to the CS as well as its seeming lack of relevance to his writing needs. He apparently did not notice that writing assistance was a part of the CS's English services.

Victor

In contrast to Leslie, who used the OWC only twice, and Lydia, who used it only to improve her paper grades, Victor sincerely wanted to improve his writing skills, not just his formatting or grammar skills. A 53-year-old pursuing a paralegal studies undergraduate degree, Victor began his degree in the fall of 2013 with transfer credit from one other university he

attended from 1999-2004. He was in his final semester at the time of this study and used the OWC throughout his degree—54 draft reviews from November 2013 until his replies to the email questions. He located the OWC by exploring Blackboard when he gained access to his very first course: “I decided to try because I knew I needed some guidance with my writing and it was suggested by my professors” (Victor, R1i, p. 1). In his survey response, Victor prioritized long-term improvement over better grade on paper and ranked convenience and academic improvement as extremely important with connectedness as only moderately important. In the interview, he elaborated, “I was hoping to improve on my writing skills through the service. The biggest needs I had was sentence structure and organizing thoughts. I was hoping the service would give me a better understanding of how to overcome those problems” (Victor, R1i, p. 2). He consistently maintained his focus was improvement of skills and never mentioned doing better on the paper or on his grades.

This consistent focus on his writing as a whole even carried over into his comfort level with using the OWC: “In the beginning I felt my writing was so bad I didn’t know if I could be helped, so I was a little uncomfortable using the service, but felt I needed to.” But he went on to imply that the website somewhat allayed his fears about everything but the feedback:

> After reading about the service I could see it was going to be a great service to use. The turnaround time was great and easy to access in my opinion. I was more nervous about the feedback that I was going to get, because I felt my writing was so bad. (Victor, R1i, p. 2)

Victor could have been one of the several survey participants who admitted to using neither service because of their anxiety about sharing their writing, but his desire to improve pushed him beyond that fear.

Victor's descriptions of his draft reviews reveal he was pleased with both his feedback and the sense of connection he felt with his tutors. Of the feedback he received, Victor wrote:

> My most requested assistance was grammar, sentence structure and organization. I received lots of assistance such as; grammar, punctuation marks and when and when not to use them, sentence fragments, and paragraph structure. My tutors would also provide other links where I could find additional help. (Victor, R1i, p. 2)

Over the course of 54 reviews, Victor had seven different tutors, but he had the same tutor for 26 of those reviews, which may clarify his following comments on connectedness:

> The communications was great and after having the same tutor most of the time I felt there was a personal connection there . . . having the same tutor I understood the feedback easy and the tutor could see my areas of improvement. They also seem to see where I was trying to go with my papers and because of that I felt a connection with them. (Victor, R1i, p. 3)

Though the OWC does not allow students to choose their tutors, the undergraduate tutor team is smaller, thereby providing greater chances for prolific users to be assigned the same tutors.

Victor perceived his own post-session practices as meticulous, as might befit one who was determined to improve his writing skills permanently. Victor wrote as follows:

> The revision process I used, I would read all the notes from the tutor and read the links that was provided to get a better understanding what I was doing wrong. Most of the time I did choose to revise because after reading my paper over I could see where I went wrong and it would help my papers if I revised them. I choose to follow most their advice because after seeing the improvement in my writing it just made sense. I want to make sure I understood the changes, not just making them because the tutor suggested it. The

> only time I did that [ignored tutor suggestions] was with citing sources. Some of my papers were in bluebook format and I don't think they were familiar with that style. (Victor, R1i, p. 3)

These are the revision habits of a student invested in learning rather than striving for a temporal fix or a better grade, as well as one who takes the time to ensure the advice is correct. And Victor believed that routinely using the OWC and revising accordingly had helped him improve:

> Very pleased with my final drafts because with the help I could see the overall improvement of my work. The writing assistance was very helpful because I could see the improvement in my work and it gave me confidence. The biggest area that I feel my writing has been strengthened is with sentence structure and pronunciation marks. In particular subject and verb comparison. (Victor, R2i, p. 3-4)

Along with these favorable perceptions, Victor offered no criticism or suggestions for the OWC's improvement. Of the commercial service, he wrote, "I did look at [it], but I think once I started using the online writing center and was getting such good results I didn't go back to it" (Victor, R2i, p. 1). Victor found a system that seemed to work for his primary goal and stuck to it. Very few participants who ranked long-term writing improvement as more or equally important as short-term grade improvement gave interview answers that actually showed such emphasis. Victor did.

Joy

Joy, a 47-year-old straight-A junior majoring in psychology, started her degree in the fall of 2014 with transfer credits from two community colleges attended in 1986 and 1992. She submitted to the OWC draft review service 19 times since fall of 2014 and was one of only three interview participants to use the OWC Skype option, which she tried twice. She first noticed the

OWC link in her exploration of Blackboard and then a teacher of hers also emphasized it in a class email. Joy wrote, “I decided to try it because I hadn’t written a paper in APA in a very long time and wanted to get a baseline for either how good or how bad my APA skills were at the onset” (Joy, R1i, p. 1). Despite ranking convenience and long-term improvement over the other goals and priorities, Joy wanted only APA assistance, at least initially.

Noting her pre-session jitters before using both services, Joy attributed them not to any problem in feature designs but rather her own feelings towards new experiences. Of the draft review, she wrote,

> Initially, I would say I was a little intimidated because I really didn’t know what to expect. I don’t think there was anything off-putting in the process of setting it up. It was a new experience and I really had no idea what I was going to get back or how the tutor would actually provide the feedback. It was actually very easy. I liked the way the feedback was provided and was thankful I had chosen to submit my paper. (Joy, R1i, p. 2)

Joy felt even “more nervous” about her first Skype appointment for the same reasons, but she did have a criticism regarding its timeliness factor: “After using [the Skype option] I wish it were easier to schedule. By easier I mean that it could be scheduled in a quicker time frame” (Joy, R1i, p. 2). She felt as though having to schedule appointments two days in advance did not fit well within an 8-week course’s compressed requirements, apparently failing to notice the Skype appointment’s similarity to the 48-hour turnaround time for draft submissions, which she used more often.

Joy described her initial Skype session enthusiastically whereas she described her draft reviews as mostly helpful but less collaborative. Of her Skype session, she wrote:

> My initial experience was amazing and I learned so much in that one session. When I used the Skype service the communication was great. I was able to ask specific questions about where I was struggling with formatting, grammar or content. I learned much more in that one Skype session if compared with one single draft review of a paper. (Joy, R1i, p. 3)

But of her draft reviews, she had this to say:

> The assistance I received matched with my request most of the time. The tutors used comments and links to help provide additional examples. It depends on the tutor as to where they focused their review. For example, sometimes they will be heavy on pointing out grammar yet very vague on content or vice versa. Overall, I would say it is balanced more often than not, but it does depend on the tutor. Overall I am almost always very satisfied with the assistance I received. (Joy, R1i, p. 4-5)

She added that she did not view her draft submissions as collaborations, stating that "there doesn't seem to be any communication. I submit the paper and they review it and I get it back with their comments" (Joy, R1i, p. 3). Joy later discovered she could email the OWC for clarification and was very happy to learn that.

She perceived her post-session practices to include mostly following tutor advice, using previously reviewed papers to help her revise new work, and using the OWC writing aids for additional assistance:

> I almost always follow the grammatical and/or voice revisions suggested by the tutor. Other things mostly depend on if the comments or suggestions will allow me to stay within the more specific instructions of the Professor. I have gone back to papers reviewed previously as aids to check my own work on new assignments. The APA guide,

> the APA sample paper (thanking the good Lord for the new revised one!) and the links provided are my three go to aids when writing! (Joy, R1i, p. 6)

Her perceptions of her own improvement include helpful information that she said had led to increased confidence, including a better understanding of APA citations and headings as well as other assistance she did not request but was happy to receive:

> I remember one paper in particular in which some easy to remember advice (words to search the paper for) to help me review my paper for being in the correct voice was given and I do that check after I finish a paper every time (words like I or we, etc). I think in my Skype session one of the things she pointed out was to look for the word 'that' as often it is not needed and overused. 'That' ☺ is another check I do after finishing writing papers now as well. (Joy, R2i, p. 6-7)

She concluded with this praise: "I have learned a lot and am very appreciative of the tutoring service. It has also provided me with some foundational information that has increased my self-confidence in writing" (Joy, R1i, p. 6).

Thus, Joy's only criticisms offered were an implied need for feedback consistency among tutors and more immediate scheduling for Skype appointments. As to the commercial service, Joy shared that she had tried it out for math tutoring and had found it difficult to stay connected to the online chat service. Hence, she had never tried it for writing assistance.

Commercial Service-Only Users

Four participants had not used the OWC at all and had used one or both of the commercial service's options: the asynchronous draft review or the synchronous real-time chat. Participants had used their selected service(s) between 1 and 13 times.

Greg

Former military and the oldest participant at 61 years, Greg was a senior pursuing a Christian Ministries degree beginning in the fall of 2014. His transfer credits from a school attended in 1973 and one in 2013-2014 make it clear that Greg waited nearly four decades to return to school and chose to do so online. He used the CS's draft review service twice after seeing a reference to it in his introductory course's custom textbook and in a class email from that course's instructor. Greg's survey response prioritized getting a better paper grade over long-term improvement, and he ranked connectedness and academic improvement over convenience. His need was mainly to learn Turabian since he had previously used only MLA and his new program required Turabian. The second time he used the CS, he wanted grammar assistance too.

In his account of his pre-session experience with usability, Greg described the drop-off service as lacking in clarity:

> I was confused at first about how to submit a draft to the tutoring service. The directions were not that clear and specific, however once I had completed the process the first time and was able to retrieve the paper it became much clearer to me. I would suggest that an e-mail be sent as soon as the tutor has completed the review. (Greg, R1i, p. 2)

He also mentioned that he was a bit familiar with the technology from a similar system at his prior college. In describing his draft review feedback, Greg was clearly less than pleased:

> Assistance provided was good in the first experience. The second experience the tutor seemed to know less than I did. Turabian was a new format for me being a transfer student and was used to formatting papers in the MLA Style. I was interested the second time in more a grammatical assistance. I submitted a paper in the second case using the

> suggestions of the tutor and based upon the comments made by the instructor I would have been better off going with what I had originally written. I also had a local tutor for the Seminary Program, who will remain anonymous, who agreed that the original text was better than the corrected text. I would rate it a 5 on a scale of 1 to 10 based on not getting that good of advice on word usage however punctuation assistance is good. (Greg, R1i, p. 2)

Since Greg's priority, according to the survey, was getting a better grade, his second experience with the CS's draft review clearly did not help him achieve that goal, nor did Greg feel that any collaboration or sense of connection occurred:

> The communication between the tutor and myself was minimum. I basically submitted the paper and looked at the recommendations and made changes. Other than that there was no interaction. I cannot say I felt any sense of connection and like previously mentioned I had mixed feedback on the quality of the responses. (Greg, R2i, p. 3)

His comments on his own post-session practices continued his focus on his grades:

> I followed the advice given as far as sentence structure and punctuation. Also followed word usage suggestions. In one case I received a good grade after following the suggestions. In another case I received a poor grade 'C' by following the suggestions. (Greg, R1i, p. 2)

In his concluding comments, Greg noted that his second experience might have been an anomaly and that his first experience did provide him with the kind of helpful feedback he sought:

> Extremely satisfied with the turn-around time, however some of the tutors may be rushing and their work is lacking in quality. I am sure those working at the Online Writing Center do an overall good job and I may have had an exceptional disappointing

> experience. I am, not bragging, a fairly competent writer getting A's in my previous English Composition classes, at [my former university]. Formatting was my biggest need and it was met with excellent turnaround time, my previous school took 2-3 days and weekends did not count so I was pleased with a 24-hour turnaround on a paper. (Greg, R2i, p. 3-4)

The speed with which he received feedback contributed to his positive perception of the CS design, but the nature of that feedback, which may have been tied to the time limit imposed on CS tutors, hindered his growth as a writer—at least in the one case. Finally, based on his comment above about the OWC and his response to interview questions about the OWC, Greg must have thought the OWC was the writing assistance part of the CS that he had tried and was not aware of a separate OWC provided by his own institution.

Cassie

The youngest participant, Cassie was a 20-year-old sophomore pursuing a degree in Christian Ministries. Another straight-A student, she enrolled with transfer credit from an institution she attended from 2015-2016 and 54 credits from tests like CLEP and ICE. The spring of 2016—the same semester this study was conducted—was her first semester of fully online classes. At the time of the study, Cassie had used the CS chat service only once in her short time as a new online student. She discovered it through a customized class textbook for the introductory orientation course for online students: "I decided to try it because I needed help last minute, and I knew that would be the most quickly accessible tool" (Cassie, R1i, p. 1). Though her survey response prioritized long-term improvement over short, her expressed need was merely a very specific citation question: "I needed assistance citing my sources on a power point

presentation. I hoped that the tutor would give me specific instruction on how to cite the sources in the format required" (Cassie, R1i, pp. 1-2).

Cassie also ranked convenience as equally important with her highest ranking of academic improvement and felt the CS ease of use and timeliness met her convenience needs:

> This format was extremely helpful and easily accessible. The tutor was immediately available to chat. It was definitely easy to use. My impression was very positive, though up until I saw that I was student 0 in the queue line, I was apprehensive of having to wait for a long time. The most encouraging and positive part of the entire experience was how quickly and easily I could specify my need and then see that I would be helped quickly. (Cassie, R2i, p. 2)

Hence the speed and ease with which she connected to assistance impressed her the most, but she was less enthusiastic about the kind of assistance she received.

Initially, Cassie's perception of her tutor's helpfulness and her own sense of collaboration conflicted with her survey responses, in which she only somewhat agreed that her tutor accurately interpreted her needs or collaborated with her. At first, she described her experience thusly: "I felt that the tutor talked to me as a real person and respected my questions; clarifying when necessary. She was helpful and efficient" (Cassie, R1i, p. 2). When asked to elaborate because of her less enthusiastic survey rating of the tutor, she explained that there actually were communication issues:

> Basically, I think that my need for finding the way to correctly source the information was not easily communicated. So I don't think that she first understood my question, which is why I didn't strongly agree that she accurately interpreted my needs. But it could have been my fault, which is why I said what I did in the previous answer. I

> disagreed that she clearly communicated helpful explanations, because she didn't necessarily explain, but pointed me to a good website for such issues. (Cassie, R2i, pp. 2-3)

Cassie did not want to fault the tutor for something that may have been Cassie's own fault, as she saw it., so in her survey rating, she credited the tutor for pointing her to a website that might have helped.

However, in Cassie's description of her post-session actions, she revealed that the proffered website did not contain what she needed:

> I used the website that she shared with me to understand APA format better, but ended up not finding the exact need I had on that link. So I had to go outside of what the tutor shared to find a more specific answer. However, she got me started in the right direction and I got full rubric points. (Cassie, R1i, p. 3)

Cassie emphasized that, indirectly, the tutor's suggestion led to full rubric points, which, though in conflict with her survey responses, seemed to be her primary concern.

Regardless of her tutor's lack of effort to understand her issues, Cassie concluded with high praise for her one experience with the service:

> I was very satisfied. I will use this tool again in the future. Now that I know how it works, I would also highly recommend it to fellow students. As an online student, it is a relief to have assistance 'at my fingertips.' The tutor's knowledge was not necessarily shown through the assistance offered, since she simply led me to a website in search of the answer to my question. However, I believe she could have answered my question(s) if needed. (Cassie, R1i, p. 3)

She gave the tutor the benefit of the doubt, but more importantly, she very much enjoyed the design of the CS's real-time chat service, particularly its ease and speed of connection and its immediacy.

On the survey question about why she had not tried the OWC, she marked that the OWC seemed more difficult to use, less helpful for "fixing my paper," and less convenient. However, when asked if she would have emailed her citation question to the OWC and received a very specific, correct answer within a couple hours had she known she could, Cassie said, "Yes, I would have done so, if I knew it would only take a couple of hours" (Cassie, R2i, p. 4).

JD

An A/B student and 38-year-old male pursuing a Master of Divinity in Pastoral Ministries degree, JD began his degree in the fall of 2014. He used the CS's draft review option three times, and claimed that he tried to use its chat option several times in the early morning hours but was never able to connect to a writing tutor at that time of day. Both his survey and interview responses showed an unwavering focus on fixing his papers and earning a better grade. On the survey, he prioritized his paper grade as more important than long-term improvement, and he ranked academic improvement and convenience a notch above connectedness. He recalled his purposes for trying the CS's writing assistance this way:

> I wanted to achieve the best grade possible, but I also wanted to make sure my assignment addressed all of the required elements. I figured another set of eyes could only help achieve that goal. I also needed help with proper Greek block diagramming and proper exegesis. (JD, R1i, pp. 2-3)

In pursuing this assistance from the CS, JD "loved the format" of the website, particularly the ability to choose different topics of assistance, rate tutors, and mark tutors as favorites (JD, R1i,

p. 3). He found the functionality easy to use, with two specific exceptions. The first was his concern over what was being done with the work he submitted since it had to be submitted anonymously:

> The only part that left me feeling uncomfortable was the popup warning to not include my name or what university I was attending. This left me wondering where my paper was going and who would have access to it. With the safe assignment program that checks for plagiarism, the last thing I wanted to worry about was someone taking my research and using it for their gain and possibly causing my assignment to be flagged for content. (JD, R1i, pp. 2-3)

Safe Assign is the plagiarism scanner built into Blackboard that nearly all courses use to prevent and identify instances of academic dishonesty, so JD worried that his work was not protected as his own. His second concern related to site communication:

> The only issue I had was when I submitted a paper over 15,000 words and logged off without realizing I had exceeded the limit. The next day I still had not heard back, which is rare, so when I logged on and it showed no record of the submission I panicked. It was only after trying to resubmit the same paper again when I noticed the small popup that there was a word count limit. This would have been nicer if a log showed a failed attempt instead of just showing no record. (JD, R1i, p. 3)

He felt that the service should have communicated more clearly about both the existence of a word limit and his failed submission attempt.

JD sang the praises of his draft reviews and the tutors who provided them, quite pleased with the feedback he received and the sense of collaboration and connection he felt.

> I really enjoyed the feedback from [the CS]. It can be real easy to get offensive when someone critiques your assignments, but each tutor delivered the feedback with such positive encouragement that it didn't feel abrasive. I also enjoyed their use of personal preference and suggestions instead of just saying what had to be changed. The tutor advised using the word 'that' a little more frequently to allow the paper to flow better, but prefacing that statement was more of a personal preference. Upon reading the paper out loud, it did make more sense. (JD, R2i, p. 4)

In addition to the above, JD also shared some correction to punctuation and grammar he received on his second paper and went on to describe his final submission up to that point, with a strong emphasis on his grade:

> The exegetical paper was a very difficult assignment and most of the tutor's advice was grammar related. I scored an A- on the paper and I was happy with that grade. The professor's instructions must have been over five pages long and I feel the tutor took as much into consideration as possible. (JD, R2i, p. 4)

In his final comment on whether he felt his tutors collaborated with him, he still focused on his grade as a way to determine whether collaboration had taken place:

> I really feel that [the CS] offered the best insight regarding what I could do to make my paper better and this was measurable considering I scored 8 points higher on the assignment when they collaborated on it. I think it came down to the personal comments within the paper and the encouragement that was offered and the positive/constructive critique of the work that established that connection. (JD, R2i, p. 5)

Hence, JD felt the way the feedback was given contributed to his higher paper grade, in addition to the correctness of the feedback.

On his own post-session practices, he added these comments, which all make it clear that he paid close attention to tutor comments and revised accordingly, given his focus on ensuring the highest grade:

> I loved the format the assignment came back in. It was easy to print off and go item by item with constructive feedback available on each item. The tutor stated not only what, but also why and offered insight on how to make the paper flow better. (JD, R1i, p. 5)

JD concluded with one final comment of appreciation for how he felt he had grown as a writer:

> I would say I am a better writer after every paper. [the CS] has opened my eyes to things I would not have considered like writing a proper introduction and making sure the conclusion summarizes and verifies what the paper set out to do. Also, with each assignment, I feel more comfortable knowing I can have another set of eyes help me in the draft and final stage before submission. (JD, R2i, p. 6)

When asked about the OWC, JD shared that he had consistently used the writing aids and resources on the OWC site and really appreciated them.

Tanya

A 42-year-old student pursuing a Master's in Human Services: Counseling degree, Tanya was the only English language learner (ELL) participating in the interviews; her first language was Portuguese. After learning of the CS's existence from her professor, Tanya initially tried a few CS real-time chat sessions then switched to using the CS draft review service instead, using it 13 times by the time of the interview. In her survey response, she prioritized long-term writing improvement and short-term grade improvement as equally highly desired; she ranked connectedness as only slightly important and academic improvement and convenience as both extremely important. As to her specific writing needs, Tanya wrote, "I have very difficult time

figuring out the English grammar rules and punctuation" (Tanya, R1i, p. 1). As an ELL then, she wanted assistance primarily with learning basic rules of the written English language.

With this goal in mind, Tanya tried the CS's chat service and experienced several difficulties that eventually drove her to try the draft review (drop-off) option instead, which she found much easier to use. She summarized her technological frustrations as follows:

> The tutor chat was quite stressful to use. Sometimes it does not work properly, like we as talking and doing correction and then suddenly we lost the signal. Sometimes it took too long to be answered by the tutor, another times, the tutor took so much time asking me questions about what I think it was wrong. If I need help, I think is because I do not know the answer. The technology was easy to use, but it did not function well. I experienced several signal lost and I had to start over with another tutor. The communication could be faster, it was not in real time like when we are chatting on the web. Sometimes I though they are helping more than one person at the same time. Also, because I was using the chatting model I expected the tutor to be more agile in help me. I felt sometimes they are only try to get more time procrastinating the answer. (Tanya, R1i, pp. 2-3)

Apparently, the few times Tanya tried using the CS chat option, she had to wait too long, had problems connecting or maintaining connection, felt the tutors did not respond quickly enough, or felt the tutor took up too much time trying to understand her needs. It appears that Tanya was very conscious of the fact that the university allows students only 20 hours per semester of access to the CS, so she wanted to conserve as much of her allotted time as possible, as evidenced by her switch to the draft review service: "Then, I started to use more the "drop of" mechanism, so I was able to save my time and got what I really need" (Tanya, R1i, p. 2). Of the CS draft review technology, she wrote, "the [CS] has being a great help, the technology is easily

to adjust, and this service has being helping me get better grades" (Tanya, R2i, p. 2). When asked whether she meant the draft review saved her personal time or her allotted CS hours, she replied, "Both" (Tanya, R2i, p. 2).

Though Tanya's CS chat experiences were negatively affected by the technology, she had a better, though not perfect, experience with the draft review service:

> Almost of the times I am very satisfied. There was sometimes the tutor did not review my entire paper like was suppose, for example I sent the 2 pages document and the tutor sent it back saying that he or she just have time to correct 2 paragraphs, and this paragraphs did not have much corrections, I felt something was wrong. They give me several websites that has grammar and punctuation teaching. Sometimes they make the changes and explain what was wrong, but the major of the times they marked what is wrong and give me suggestion of how to correct. (Tanya, R2i, pp. 2-3)

Again, Tanya noted the time issue that the CS tutors were often limited by the amount of time they could spend reviewing a paper and had to send it back with only a partial review, leaving her without some of the feedback she really wanted.

When asked if she felt like she and her tutors collaborated on her papers or whether she felt a sense of connection to her tutors, Tanya wrote, "Yes, we make changes in my paper. Yes, the tutor collaborated to make my paper better. I do not feel any kind of working together, since I never get the same tutor twice. The drop-off is the practical way" (Tanya, R2i, p. 3). She felt her tutors' feedback on the paper constituted a collaboration of sorts but felt no sense of connection, but nor did she wish to have connection since she ranked connectedness a very low priority on her survey.

Ultimately, Tanya expressed satisfaction with the CS's draft review service as she described her post-session practice of reviewing tutor feedback in order to make revisions:

> I usually follow the tutor advice, but sometimes they make mistakes about the APA format, then I just ignore the advice regarding the APA format. I am very satisfied with the tutor help. I know without this kind of assistance will be almost impossible for me to do my papers. Yes, with the tutoring I am improving my English's writing skills. My vocabulary has improved considerable and my punctuation as well. (Tanya, R2i, p. 3-4)

So Tanya did, more often than not, follow each tutor's advice unless she felt she knew better on formatting and style.

Regarding possible usage of the OWC, Tanya marked on the survey that it seemed less collaborative and too difficult, but then in the "other" text box, she wrote this: "The website does not specific the difference tutor and writing center, they looks like the same. I thought if was using tutor I was using the online writing center" (survey 162). When asked if she would try the OWC now that she knew they were two different services, she replied, "Maybe I will try the online writing center on bigger papers. But I am comfortable with [the CS] to make correction on my weekly papers" (Tanya, R2i, p. 1). Upon receiving the survey email, Tanya appeared to believe that the OWC and the CS were the same service, having apparently visited only the CS website. She seemed content enough with the CS draft reviews to forego the OWC option unless the need for a full paper review arose.

Users of Both Services

Four participants had used at least one option (synchronous or asynchronous) of each service. All had used their selected options from 1 to 11 times.

Celia

A 28-year old earning a B.S. in interdisciplinary studies, Celia was an A/B student who began her degree in 2015 with senior status due to an abundance of transfer credits from a community college attended from 2005 to 2008. She learned about the OWC from her instructor and tried its draft review service twice; she learned of the CS by exploring resource links within Blackboard and tried its draft review service thrice. On the survey, she prioritized both short-term and long-term goals as equally high and ranked all three features as extremely important. In her interview, she recalled seeking assistance for "corrections in areas of APA format, flow, and introduction & conclusion paragraphs" (Celia, R1i, p. 1).

Celia found the CS drop-off draft service easier to use and faster than the OWC draft service. Apparently, she had technological problems with aspects of the OWC request form:

> [The] OWC was a little more difficult to use because I had a hard time finding my paper after it was reviewed and took two days for revision, which didn't quite fit my time schedule. [The CS] was very easy to use and my paper came back very quickly, always less than 24 hours ☺. (Celia, R1i, p. 2)

After mentioning her difficulty in locating her reviewed paper, she also wrote of the OWC, "Another upset was the website itself… I did have a hard time uploading my paper, I feel like you should just click on the link and it should pop up" (Celia, R1i, p. 4).

Celia's described experiences with her OWC draft reviews were also less flattering than her CS draft reviews, though as Celia's conclusion below shows, there may have been a reason for that. About her OWC reviews, she wrote that she was directed to the Purdue OWL website for citation information, which she found helpful, but she also noted the following:

> I honestly was a little let down with my experience with OWC. The paper obviously was not totally reviewed (the comments stopped halfway through my paper) so my conclusion was not looked at which was one of my requests. Especially, since my paper took two days to be reviewed I expected a lot more input on my requests. (Celia, R1i, pp. 2-3)

When questioned in the follow-up round about the tutor summary comments at the bottom of each OWC review, Celia said she meant that the OWC had not commented on the final portion of her paper itself as opposed to the CS tutors who had. Since she had marked "introduction & conclusion" as items with which she needed assistance, the lack of comments on her conclusion bothered her. When I asked why she had not included her assignment instructions on either OWC request form, she seemed surprised:

> From my recollection, I did provide assignment descriptions in the same way as [the CS] by copying and pasting my assignments… If I did not then maybe this is the reason the tutor was vague, maybe there was a cross when it was sent? I am not sure. (Celia, R2i, p. 3)

She had provided assignment instructions for the CS tutors but not for the OWC tutors who then had nothing to guide them on what to look for in the introduction and conclusion. In contrast, Celia's description of her CS draft review feedback was significantly more positive:

> The tutors really helped me understand why things in my paper needed to be revised. For example, I wrote "are" and it should be "is". I was advised to read aloud the sentence with each, which immediately made me realize which way correct. They also advised me to use [Purdue OWL]. My experience, in its entirety, was great. I felt like my tutor tried to connect with me, on a personal level, by complimenting their likes of my papers. The comments were very qualified and conceivable. (Celia, R1i, pp. 2-3)

She felt as though she connected much more with the CS tutor than with the OWC tutor because the CS tutor complimented Celia's work. She perceived their comments as those of experts.

In describing her post-session practices, Celia acknowledged that she did mostly try to follow the advice from tutors of both services. She wrote that she used the Purdue OWL website after first learning of it from an OWC tutor, and it helped her figure out how to cite a story within a collection. She also wrote of her OWC feedback, "Another recommendation was to not start with a quote, I did take this into account but I stuck with my decision because I felt it made the biggest impact on the reader" (Celia, R1i, p. 3). About her CS feedback, she wrote,

> I took into account most of what the tutors said and made grammatical, tense, format, transitional sentences, and flow corrections through help of the tutors. I did follow one tutors [advice] of waiting until the end of a sentence to cite but it was not correct in that particular instance. (Celia, R1i, p. 3)

In this instance, Celia followed the suggestion of a CS tutor, it was marked incorrect, yet she seemed willing to overlook this incorrect feedback due to the compliments the tutors gave her. "Their compliments helped boost my confidence so I wasn't 'scared' when writing my papers. It took only a few hours for review which was a big plus!" (Celia, R2i, p. 4). She concluded, "I was definitely impressed with [the CS] and will continue to use it throughout my university experience ☺" (Celia, R2i, p. 4). In Celia's case, she perceived the OWC as more of a hindrance to her growth as a writer and the CS as more of a help.

Patty

A 49-year-old student who began her Masters in Human Services: Counseling degree in Summer of 2015, Patty learned of both the OWC and CS draft review services when one of her instructors sent an email to the class specifically highlighting them. She later discovered the CS

chat service after visiting the CS website. On the survey, she prioritized both short-term grades and long-term improvement as equally high and ranked all three features as extremely important, but in the interview, she consistently prioritized the paper grade and convenience over the other goals and features. Of her reasons for seeking assistance, she wrote that she needed "help to assist with obtaining highest grade possible from assignment" and "grammar pointers and help with understanding what the professor was requiring for the assignment" as well as assistance with sentence structure (Patty, R1i, p. 2). At the time of this study, she had received six OWC draft reviews, eight CS draft reviews, and one CS chat session less than a minute long.

Patty's perceptions of the three services' usability primarily revolved around their convenience in fitting into her busy schedule, as she found both websites easy to access and equally welcoming: she wrote of both, "Website very inviting, just the right amount of information needed" (Patty, R1i, pp. 2-3). Their differences in convenience either drew or repelled her the most, beginning with the CS chat which she tried first and "was impressed with the superb assistance," though she gave it less than a minute (Patty, R1i, p. 3). Patty confessed:

> The [CS] chat was good for the short time I used it, it was just that it was too time consuming for me. Instead of sitting there on chat trying to correct my paper with the tutor, I had other things in class or just in life in general to do because I work a full time job and am active in several ministries in church, along with ministering outside of work and church. So [the CS] draft review was better for me, I could submit then go back later to retrieve and review my results. (Patty, R2i, p. 1)

She described having a "high level of initial comfort" with the OWC draft review service as well, but explained how its longer turnaround time reduced her usage:

> Because of the 24 hour turn around I have only used the service a few times, but received great results from when I did use the service, time consumption was my issue with this service, especially if I could only finish my work on a Thursday or Friday then it would not leave enough time for a turnaround to turn in work that Sunday deadline. (Patty, R1i, p. 2)

She concluded her assessment of these services' usability by describing the CS as "very comfortable and quick on returning feedback in a timely manner" (Patty, R1i, p. 3)

In writing of her perceptions of the services' helpfulness, Patty praised all of them, and mentioned three separate times that they helped her achieve high grades. Describing her CS draft reviews, Patty wrote,

> [The] tutor made paper better, without their assistance I believe my grade would have been lower, my grades on my assignments were very high, summary feedback was extremely helpful and they even added website links for further clarity; Notes were already provided and I made changes to my paper. Writing assistance did not make changes to my paper. (Patty, R1i, p. 5)

She wrote a nearly identical description of her OWC draft reviews, except she said "the suggested changes were helpful" rather than touting summary feedback and website links (Patty, R1i, p. 4). She wrote that both draft reviews assisted her with "grammar and sentence structure," with "examples of usage of singular/plural verbs to coincide with the subject," "with putting commas in the correct place," and "when commas are needed and when they are not," though only the OWC helped her with APA style (Patty, R1i, p. 4). As to her one brief CS chat session, she noted the tutor was "very clear and to the point when answering my questions about grammar and sentence structure" (Patty, R1i, p. 5), so she had nothing negative to say in terms of

the quality of her feedback from any of the three services. They all contributed to higher grades, which seemed to be her primary goal.

Patty claimed she made all recommended changes after every review from both draft services, except for the occasional APA formatting advice she felt contradicted her instructor's specialized requirements. She commented that following suggestions made her papers "sound and flow better and they turned out well because [her] instructor was very impressed with [her] scholarly writing" (Patty, R1i, p. 5). When indicating her overall satisfaction of all services, she again mentioned her grade: "Very satisfied, with assistance, resulted in a final grade of an A" (Patty, R1i, p. 6). In response to a follow-up question of how her writing had improved due to using these services, Patty wrote:

> My grammar has improved, sentence structure improved from tutor giving me examples and website so that I could further understand how to correct my grammar and sentence structure. The clarity of my sentence reads smoother now with more sense and comments from my instructors, like 'I'm writing on graduate level now.' (Patty, R2i, p. 6)

When pressed as to which service she preferred, she again touted the convenience of their speed as the primary reason she perceived the CS the more helpful of the two:

> Both [the OWC] and [the CS] Draft Review are good, right now I would have to say [the CS] Draft Review because I spend more time using them, they are quick, give great and helpful extensive feedback, encourage me in the areas that I did great in and can obtain assistance from them at any time (especially with short notice). If I had time to use Writing Assistance more then, my praise for them would be higher because when I have used them, they gave great helpful feedback. (Patty, R2i, p. 5)

Despite the "extensive feedback" praise, however, Patty did admit, in response to a follow-up question, to having received partial feedback from the CS:

> I was not very happy because I have a set amount of time allotted to me each term – 20 hours for two classes, and when I submitted a paper for draft review and the tutor stated they did not have time to finish, 50 minutes was still charged against my time and if I submitted again then another 50 minutes was charged against my time. I think that if the tutor doesn't have time to complete the review then they should send it back to me and I could resubmit without having 50 minutes charged against me since they could not complete the entire task. (Patty, R2i, p. 3)

Here Patty referred to the 20 hours per semester allotted for the university's online students to use the CS. What she apparently did not understand is that the CS tutors were allowed to spend only 50 minutes on a paper and must stop wherever they are in a given paper whenever their 50 minutes is up, which is why she was charged 50 minutes. Nevertheless, Patty perceived the CS and more helpful since it helped her attain the desired good grades with less wait time, though perhaps not quite as thorough reviews.

UB

The only interview participant with a documented learning disability, UB was a 49-year-old female who began a master's degree in the summer of 2015, majoring in pastoral counseling with an emphasis on addiction and recovery. Throughout the interview, she emphasized her disability and the services' hindrances to helping her more than she focused on her general writing assistance experiences, making it very clear she believed not many understood her disability or made a strong enough effort to accommodate it. She described herself in this way:

> I have a reading and writing disability. The way in which it impacts my writing is that I am unable to edit my own writing. I cannot see verb agreement, missing (s), even if I read it aloud I still will miss it. Yes, I grew up with this disability. I was pass from grade to grade without any help. In the 70's they did not have the technology or understanding of disability like they do today. However, there is a lack of understanding for cognitive disability today. I received documentation for my disability at the age of 42. (UB, R2i, p. 2)

Though her interview responses indicated she much preferred synchronous services and preferred the CS chat to either OWC service, UB had received ten OWC draft reviews, participated in 11 OWC Skype sessions, and engaged in nine CS chat sessions at the time of this study, perhaps because she learned of the CS's existence only after using the OWC:

> I called the customer service line before submitting my application to the University, because I wanted to make sure they could accommodate me. They did not tell me about both services. I learned about [the CS] from my Skype tutor, because I was so disappointed with OWC. I was failing my class. The gentle was extremely nice and always encourage me because he could see that I was trying. He always help place the grammar check on my computer. If it was not from him I would not found out about [the CS]. (UB, R2i, p. 2)

On the survey, she prioritized paper grades as equal with long-term improvement (only "somewhat" agreeing they were reasons that she might seek writing assistance) and ranked all three features as equally "very" important rather than "extremely important." UB explained in detail what her writing needs were and did not conceal her desire to have her papers edited for her (which both draft services claimed to avoid). She wrote,

> The result that I hope to achieve on my papers was corrections in writing with assistance with my grades. I did not received those result. I received several fail grades on my writing assignments. I need, verb agreement, sentence structure, and sometimes contents. I inquiry about the service, since I have a writing disability. I was very specific about my needs at [the university]. However, I did not get the right services up front. the services that I needed are different from others that might use the services. (UB, R1i, p. 1-2)

She went on to clarify why she needed corrections made for her in addition to being taught rules and techniques:

> Sometimes because of the time factors for submitting your papers, I really do not have time to learn all the techniques. However, when I show the techniques it is still difficult for me to remember because the rules, are always changing in writing. A cognitive disability means the person have a hard time comprehending or remembering a lot of information. I only need help with grammar and sometimes content. Since I have a reading disability I have a hard time taking the information from my head and getting on a piece paper. With this in mind usually, my writing tutor would ask questions or have me talk it out, since all the information is usually in my head. But I have a hard time getting what in my head on a piece of paper. (UB, R2i, p. 3)

This explanation also reveals why she preferred real-time services to written feedback.

UB perceived flaws in all three services' ease of use and access, but perceived the OWC draft as the most inconvenient due to the length of turnaround time and lack of access via her tablet. Though she said that the technology was easy for the OWC, she also wrote, "The website is wonderful, however you cannot use the systems on your tablet. This was inconvenience for me because I had to get a computer. I could not up load documents to the OWC system from my

tablet" (UB, R1i, p. 2). Of Skype, she wrote that she loved the service, and her only complaints about its usability were having to make an appointment ahead of time and the fact that "some of the tutor do not know how to share the paper on the screen. There should be a consistently with those sessions" (UB, R1i, p. 3). Though she seemed to prefer the CS chat to all other options, she did have three significant criticisms about its usability. The first related to her ability to see the shared screen: "The systems was hard to get use to in the beginning. Sometimes the screen for the other person are hard to see. There comments on the paper, you cannot see their comments until they type on the side of the screen" (UB, R1i, p. 3), meaning she could not easily see the tutors' writing on the shared whiteboard and often had to depend on what was written in the chat box between her tutor and her. Her second and third issues with the CS chat seemed to reference problems accessing documents uploaded for her to her "locker," a feature each CS user had to which tutors could upload resources, reviewed drafts, and session transcripts:

> [The CS] on my tablet use to lose connection, there is no way to get your document. One of my documents took two weeks to get back because the girls computer crash. She did not know how to upload the document to the locker. Most of the [tutors] on [the CS] do not know how to upload documents to the locker if the systems lose power. (UB, R1i, pp. 2-3)

These statements appear to mean that the CS system itself went down at inopportune moments, her tablet had problems, one of the tutors' equipment had problems, or perhaps all three, delaying her access to documents she needed. Whatever the case, she perceived accessibility issues for both the OWC Draft services and the CS Chat as well as usability issues from the tutor side for both synchronous options.

UB's perceptions of her writing assistance experiences focused on what hindered her progress rather than any aspects that helped her. She further explained her earlier comments about not initially receiving the kind of help she needed through the OWC draft service:

> My experienced with OWC draft was horrible. For example if I have 52 corrects on my paper and the comments were at the top of the paper. Like comment 1 or comment 2. By the time I reach the bottom of the paper I would not know what the comment was from one or two. Each comment on the paper should state the need that to be change. I know this can be time consuming, but for a person with a disability it is needed. (UB, R1i, pp. 1-2)

Since OWC policies do not allow for editing or even for marking every single problem in the paper, tutors often refer the student back to previous comments made for a full explanation and example of a repeated issue found toward the end of the paper. UB did not find this practice helpful due to her disability.

About the CS chat service, UB noted several unhelpful aspects of feedback, stating that tutors lacked consistency in the tools they used to "correct" her papers—either a highlighting tool or a commenting tool (UB, R1i, p. 3). She also stated that some tutors disconnected with her if she required "more of them" because "they feel like they do not want you to be specific about your needs" (UB, R2i, p. 3). She criticized the CS service's lack of a phone number for immediate technical support—she said she tried several numbers that were "not good" (UB, R1i, p. 3). Her final observation about the CS service was that one tutor had restricted editing on her paper, meaning the tutor apparently made changes to her paper and then used the MS Word "restrict editing" feature to prevent UB from making further changes to that particular copy of her paper, locking the edits in place (UB, R2i, p. 3). Last, her one criticism of all the services

related to their provision of links to resources or writing aids on other sites. She wrote that, at first, she did look at other sites provided like Purdue OWL, but they did not help because of her reading/writing disability.

When asked about whether she felt any sense of collaboration with her tutors from either service, all she mentioned was the synchronous options: “Skype and [the CS] we walk through the changes. [The CS] they will highlight what they are looking at, sometimes I can see the changes. On the other hand, I might struggle through what they looking at” (UB, R1i, p. 4). Apparently, despite technical issues, she did feel as though each session was at least an attempt at collaboration.

Even in describing her post-session practices, UB maintained a more negative focus, expressing frustration with her own limitations that rendered useless some of her ability to revise. About her OWC draft reviews, she noted that her disability hindered any permanent learning: “I read through each comments and revise my papers. Usually it good to have each line commented if necessary. But remember for that one paper it might have a comment on verb agreement, that does not mean I going to caught them on the next paper” (UB, R2i, p. 5). She went on to share her practice during and after a CS chat session:

> I usually see the mistake if they are highlighting them. But if it a difficult for me to correct the whole sentence if it needs to be re-writing. I will have to do it later since I cannot respond quickly. Or I have difficulty of what form word to use like right or write etc. (UB, R2i, p. 5)

As a concluding thought about her post-session practice, she wrote,

> If the revising is specific of what I have done wrong, I usually can make all the corrections to my paper. But if it is a rule and you want me to correct the paper by the

> rule, I unable to do that. But if you write the specific details on what I need to correct, I can make all of my own corrections. (UB, R2i, p. 5)

In other words, if she is told precisely what to take out or put in or what to change to which word, she can make her own corrections, but both services try to avoid such directive assistance, which is what seemed to frustrate her, particularly with the OWC draft reviews: "The OWC [draft] services has not been helpful for me. I am not happy with OWC draft reviews, I think because they do not have the capacity like [the CS]" (UB, R2i, p. 5). She did express satisfaction with Skype, but with one exception: "The Skype services has been helpful for me but I do not use it that often because you have to schedule an appointment" (UB, R2i, p. 5). UB reserved her highest level of satisfaction for the CS chat sessions: "[The CS] really has help me to improve my papers. I like that you can spend a much time with a tutor" (UB, R1i, p. 5). At the time, UB had not discovered she was limited to 20 hours per semester since she had only recently learned of the CS's existence.

UB's final thought about her overall experience included a clear picture of how frustrating her disability has been:

> I have become a better writer, but I'm always going to need this services, since writing is a lot of information and the rules change. I making about the same mistakes, since this is my disability, I do not know if I will ever improve. Each paper is different for me. When I'm writing I think I know the rules, but I really do not know the rules, since the rules applied differently. (UB, R2i, pp. 5-6)

Essentially, UB needed her papers edited for her in order to pass her classes. In her perception and experience, the real-time services where she could talk through her thoughts and discuss

them with a tutor produced the best results for helping her achieve academic success if not permanent learning.

Adrienne

A 41-year-old self-professed perfectionist who hates getting any score less than 100%, Adrienne was the one participant whose personality clearly influenced her criticism and praise of the various services she used. She was a straight-A senior who began a B.S. degree in interdisciplinary studies in the fall of 2015, building on a foundation of numerous transfer credits from schools in Maryland, Texas, and Florida she had attended between 1993 and 2010.

Adrienne shared more about her reasons for seeking writing assistance than any other participant, except perhaps UB. In addition to her perfectionist tendencies, her language skills influenced her approach to schooling over the years. Though she learned Spanish first, she considered English a native language as well: “I spoke both English & Spanish at home and spoke Spanish at church for most of my formative years” (Adrienne, R1i, p. 2). Adrienne was very reserved growing up and also did not prioritize learning to write well throughout her first 12 years of schooling; thus she wrote, “When I returned to college as an adult learner, I realized I needed to have my writing skills groomed” (Adrienne, R1i, p. 2). She also wanted to lessen her stress level due to recovering from several medical issues: “By submitting my draft, it would be less pressure for me to communicate directly with someone. Being vigilant about my communication and trying to convey things in a clear manner can be very exhausting for me” (Adrienne, R1i, p. 2). On the survey, she prioritized her paper grades over long-term improvement and ranked all three features as equally “highly important.” Her stated writing needs were “grammar and style assistance, to catch errors that I missed. Also, I hoped that they may help me with clunky sentences & help my communication be more clear. I especially need

assistance with APA formatting" (Adrienne, R1i, p. 2). At the time of the interview, she had exchanged over 150 emails with the OWC and had nine OWC draft reviews, one Skype session, one CS chat, and ten CS draft reviews.

Adrienne learned of the OWC through either New Student Orientation or the university's banner announcements page—she could not recall which, and she learned of the CS from a webinar offered by the university. Her expectations for the OWC services (both draft review and Skype) were as high as her expectations for herself. She expected the OWC tutors to "be familiar with terminology, technology, a general idea of professors employed by [the university] (and their expectations), and familiar with expectations from courses most of us are required to take" (Adrienne, R2i, pp. 2-3). Her self-consciousness also showed in her initial choice of the OWC over the CS: "The OWC services appealed to me because I could freely express my faith not feel mocked or criticized or feel like I am offending someone who opposes biblical beliefs" (Adrienne, R2i, p. 3). For the Skype service, she "was hoping the boundaries (setting a certain time aside) would keep the conversation focused" (Adrienne, R1i, p. 2). She was initially concerned that her faith would not be respected at the CS but finally tried it and was treated well: "[The CS] has been supportive about my Christian faith and now I have been sending my drafts to them first and if I have additional concerns and enough time before the assignment deadline, I have sent it to OWC draft review" (Adrienne, R2i, p. 9). Her only comment about her CS chat experience in the entire interview was that she used it only once as a follow-up to a CS draft review: "I asked for clarity on comments a tutor from [the CS] had put on my paper. It was a learning opportunity and I wanted to get writing help before I got too busy with classes" (Adrienne, R2i, p. 5).

Adrienne thoroughly and critically evaluated the three services' usability, from website appeal to ease of access to comfort level and ease of use—again revealing her self-consciousness with each service's critique. At first, she thought she would like using the OWC service: "I was optimistic because it is advertised in various places at [the university]. The 'ads' kinda give you that welcoming feeling" (Adrienne, R1i, p. 3). However, she did not like the website at all, nor did she like the request form for submitting her draft. She rated the website as a "3 out of 10 or maybe a four because it has a picture" (Adrienne, R1i, p. 3). She went on to explain her dislike of the website: "It's too clinical (white background, font is boring and serious), too wordy, font is fuzzy (this detracts from professional appeal). Also, it spans to more than one page, one has to scroll down to know what services are offered" (Adrienne, R1i, p. 3). She did not like the request form's functionality for attaching documents and felt it required too much information, but she did note her appreciation for the 5-minute tutorial on how to use the form and receive feedback. Her biggest criticism was the lack of anonymity:

> I don't like that it is not anonymous because then I feel like people will judge me if I make the same errors that may have been corrected by that tutor before. Although, it is good they know my name if they're praying for me. ☺ Then, again, there are other places [the university] makes available for prayer requests, so praying for me anonymously may be okay. (Adrienne, R1i, p. 4)

Her criticism of the Skype service was more of a continued criticism of the OWC website itself. About finding the link to the service, she wrote, "Terrible. I can barely see where the Skype option is offered" (Adrienne, R1i, p. 4). She also disliked the hour-long appointments, apparently thinking she was required to use the entire hour. She disliked having to make an appointment,

but stated that it fit her schedule that one time. Though she said "the technology functioned well and allowed smooth communication" between her and the tutor, she admitted,

> At first I had trouble figuring it out since it was the first time I set up Skype. After fumbling a little I figured it out. But, I felt weird talking to a man on video chat. I'm a married woman, lol. (Adrienne, R1i, p. 4)

Her self-consciousness continued through her more positive critique of the CS draft review service. She described an initial discomfort with the idea: "I wasn't sure how they would receive Christian perspectives. At least [the university] tutors are my people" (Adrienne, R1i, p. 4). She felt the website was "sort of inviting" because of the "pleasing" and "bright color font" though she said "some font is not smooth" (Adrienne, R1i, p. 4). Again, her biggest submission form concern was anonymity: "It says "Hi MyName!" although I'd rather they'd use my nickname. (fyi-even though the webpage has my name, I believe the draft service is anonymous because they specifically instruct to remove our name and college info from all submissions)" (Adrienne, R1i, p. 4). She went on to describe the CS draft submission form as easy to use and "pleasing aesthetically" and said "it's straightforward, simple, [and] hits on the main points" (Adrienne, R1i, p. 2). She noted that it was easy to use because she was already familiar with using dropdown menus and file attachments. She concluded by stating the CS draft service was convenient "for the most part" (Adrienne, R1i, p. 5).

In writing of her perceptions of the services' feedback, Adrienne had positive comments for both of the draft services but not so much for her Skype session. She started by saying all three services missed noting some errors (again that expectation of perfection). Of the OWC draft service, she wrote,

> The tutors communicate well as they leave notes, summary, comments, links to resources. At first it seemed too much wording. I thought I had really messed up throughout my assignment. But then I realized that they include a generic 'disclaimer.' They do not make changes to my paper. Also, the OWC seems to have the disclaimer, summary, encouragement and comments are more organized now so it's not overwhelming. (Adrienne, R1i, p. 4)

These comments note that she was initially overwhelmed by the verbosity of tutor comments until she realized they included an opening greeting and closing summary. Of the CS draft service she wrote that "the tutors communicate well as they leave notes, summary, comments, encouragement. It helps that the website has a separate links for summary, original document and revised document. They do not make changes to my paper" (Adrienne, R1i, p. 6). She received help for "punctuation, grammar" and noted that the "tutors provided links for resources that may help" and "used the Review option in Word to insert comments in my paper" (Adrienne, R1i, p. 5-6)

Skype was the only service that wholly displeased her. She stated that she did not feel she "learned much from the actual session" (Adrienne, R1i, p. 6). She described the session as the tutor screen sharing her paper while "demonstrating, using his copy of my paper, what was being discussed" (Adrienne, R2i, p. 6). She also noted that her tutor used Skype to send her some links to resources to help with the punctuation assistance she wanted. She was bothered that the tutor made only a few suggestions and, according to Adrienne, commented that "discussion boards assignments were an easy way to improve one's grades" (Adrienne, R1i, p. 6). She wrote, "I disagree, in a way, because they're not as easy for me as with some that can communicate easily. Also, some professors are very strict in grading discussion board assignments" (Adrienne, R1i, p.

6). The tutor's comment conflicted with Adrienne's sense of perfection in all things and rubbed her the wrong way, apparently overshadowing the other feedback provided, as the tutor's report form described the session thusly:

> She was concerned with professor expectations and various format, punctuation, and content requirements. Our discussion included the use of commas, proper format of in text citations, sentence structure, citing the Bible, rhetorical devices such as conjunctions, key phrases, et cetera. Much of our time was spent reworking sentences and discussing ways to improve the style and quality of her writing. Other areas of conversation included the length of the assignment, overuse of citations, and quality of resources.

Regardless of what actually occurred in the session, Adrienne's perception was that she did not learn very much and that the tutor was not sufficiently concerned about the quality of her work because of his offhanded comment that stuck in her mind.

Adrienne's observations about the nature of collaboration and connectedness with the tutors of both services continued to reveal her self-consciousness. About the OWC draft review service, she commented, "I'm not sure how there could be smooth communication between me and my tutor. It's sort of a one way communication. At least, that's how I initially saw it" (Adrienne, R1i, p. 4). But when asked about a comment she made on the survey ("[Jamie] is very helpful. [Drew] included a verse and a prayer. ☺"), Adrienne clarified:

> She [Jamie] was there when I didn't have time to wait for the OWC service to review my paper. And, I didn't trust [the CS] then. But now that we know each other, I fear getting her upset/hurt if I ask her a question regarding writing that I should know already. I don't want tutors to think they are not doing a good job if I forget something they already covered with me. Drew's prayer was timely. I had not seen other draft service tutors say

> they were praying for me until I read his comment. It was during a specifically stressful time and the verse & knowing I was being prayed for was thoughtful and VERY encouraging. (Adrienne, R2i, pp. 6-7)

Jamie was the staff member Adrienne communicated with in those 153 emails to the OWC about citation, style, and grammar questions. The bottom line is that Adrienne would rather be anonymous to in order to avoid being judged but does appreciate connectedness to a small degree, though she ranked it as extremely important along with the other features.

Her perceptions of collaboration through Skype and the CS draft show how fearful she is of impacting tutor feedback in any way that will lessen its perfection. She described her Skype tutor as "sort of chatty" and wrote, "I did not want to ask questions and interrupt the tutor's review process. I just let the tutor do their thing" (Adrienne, R1i, p. 5). Of the CS draft review service, she wrote, "It is still more of the tutor communicating to me. When I input questions, I'm not sure if the tutor will understand it when they read it. Plus, I don't want it to deter from them doing a thorough review on my paper" (Adrienne, R1i, p. 5). She did note, however, that the CS tutors "communicate well as they leave notes, summary, comments, encouragement." She still did not view these comments as collaborative in nature (Adrienne, R1i, p. 6).

For both draft services, Adrienne described her revision practice as identical: "I put the paper with comments side-by-side with my original and go through the tutor's comments" (Adrienne, R1i, p. 7). However, the revisions she elected not to make reveal that her approach is to apply only the comments she deems as necessary or those that she has the time to apply, which is somewhat in conflict with her otherwise perfectionistic nature. Of her OWC draft reviews she wrote:

> The OWC's method is to point something out then we are to "apply throughout." The turnaround time does not allow for enough time for me to go through my paper thoroughly and "apply throughout." Also, I'm not sure if I can catch every pattern of error. (Adrienne, R1i, p. 7)

As one or two other participants have indicated, she would rather have every pattern of error located for her due to time restraints, rather than learning to apply on her own the suggestions provided. She went on to describe advice she ignored in previous OWC draft reviews:

> I do not revise if my assignment does not require what tutor suggests. For example, in APA one doesn't use first person but I from the class instructions, discussion board assignments do permit it. Also, in my research paper, I did not go back and change all my slashes to or (his/her is not appropriate in APA). (Adrienne, R1i, p. 7)

She did not comment on whether or not she applied the "very few suggestions" her Skype tutor made, but she did give an example of one suggestion she ignored in a CS draft review: "One thing I did not revise on a discussion board is to split my paragraph. It did not seem absolutely necessary and I was too tired from working on writing assignments to consider that tutor's suggestion" (Adrienne, R1i, p. 7). Thus, despite her perfectionism and desire not to influence tutor feedback, she was able to use her own discretion in determining whether to apply it.

When asked to describe whether she had improved as a writer and how the services contributed, her strongest comment was surprising and insightful, speaking to how having an audience before submitting work to an instructor might influence students' perspectives on their own writing:

> Where the services proved to be most valuable was in confidence and motivation. If the support hadn't been there, especially with Jamie's help in the past, I may have been

> crawling up in a ball in frustration. I don't know if I would have had the courage to take a 300-level course with five discussion board forums! Also, it helps me create submission deadline goals so that I can complete my assignments before the due date. In addition, sometimes I get ideas on corrections or adjustments I should make just by submitting the draft even before I get the reviewed draft back. I don't know why it takes me submitting the draft before some things come to light but it's better than submitting it for a grade and not being able to make changes. (Adrienne, R2i, p. 9)

The one hindrance she mentioned was inconsistency in APA feedback among both instructors and tutors of both services. Her final comment was that the services "lack in some areas but then make it up in others" (Adrienne, R2i, p. 9).

Chapter Summary

The above profiles include both graduate and undergraduate students, males and females, young and old, straight-A and disabled, an English language learner and a multilingual perfectionist. The profiles of these 13 participants present *their* perceptions of *their* experiences with *their* choice of services in *their* own words, thereby adding the voices of a diverse group of fully online students to the bodies of OWC design literature and online writing instruction literature. They describe their writing needs, personal struggles, and priorities in seeking writing assistance. They describe which features they felt helped and hindered their growth as writers and the reasons for those feelings, directly addressing both research questions of this study.

By way of summary, Table 16 presents a microcosm of each participant's experience with each service, labeled as "Fully Helpful" (no negative comments), "Mostly Helpful" (positive comments far outweighed negative), "Somewhat Helpful" (a balance of positive and negative comments), and "Unhelpful" (no positive comments). None of the experiences seemed

to fit a “Mostly Unhelpful” label so I did not use it. Table 16 shows the wide diversity of both academic identities and experiences among the 13 interview participants.

Table 16

Participant Experience by Profile

Name	Gender	Age	Academic Identity	Service(s)	Visits	Perception
OWC Users						
Samuel	M	28	4.0 Senior / APA needs	OWC draft	7	Mostly Helpful
Lydia	F	55	Grad student on probation	OWC draft	41	Fully Helpful
Leslie	M	57	Grad student / APA needs	OWC draft	2	Fully Helpful
Victor	M	53	Senior / improve writing	OWC draft	54	Fully Helpful
Joy	F	47	4.0 junior / APA needs	OWC draft & Skype	19 1	Mostly Helpful Mostly Helpful
CS Users						
Greg	M	61	Senior / Turabian & grammar needs	CS draft	2	Somewhat Helpful
Cassie	F	20	4.0 Sophomore / APA	CS chat	1	Somewhat Helpful
JD	M	38	Grad student / better grade	CS draft	3	Mostly Helpful
Tanya	F	42	Grad student / ELL	CS chat CS draft	1 13	Unhelpful Mostly Helpful
Users of Both						
Celia	F	26	Senior / APA, flow, & introduction, conclusion	CS draft OWC draft	3 2	Mostly Helpful Unhelpful
Patty	F	49	Grad student / better grade	CS draft OWC draft CS chat	8 6 1	Mostly Helpful Mostly Helpful Somewhat Helpful
UB	F	49	Grad student / reading and writing disability	CS chat OWC draft & Skype	9 10 11	Mostly Helpful Somewhat Helpful Mostly Helpful

Adrienne	F	41	4.0 Senior perfectionist / Maintain perfect grades	CS draft CS chat OWC draft & Skype	10 1 9 1	Mostly Helpful Somewhat Helpful Mostly Helpful Unhelpful

Table 16 demonstrates that age has become increasingly irrelevant over the past decade, as learners of all ages more readily and regularly engage in digital technology in their daily lives, apart from online learning. Students ranging from 42 to 49 tried the more complicated synchronous options, and those in their 50s and 60s tried the draft reviews. The table also reveals which services may be more helpful for specific online students with certain needs, experiences, or perceptions—all of which I will discuss in my recommendations for OWC design, practice and future research in Chapter Seven. Table 17 takes the "Perception" column of Table 16 and presents those perceptions by service rather than by participant, providing a more holistic picture of each service as a snapshot of Chapter Six, in which I conduct a cross-case synthesis of each service, pulling out patterns of perceptions that confirm, complicate, or add to the current literature.

Table 17

Participant Perceptions by Service

OWC Draft		**CS Draft**		**OWC Skype**		**CS Chat**	
Fully Helpful	3	Mostly Helpful	5	Mostly Helpful	2	Mostly Helpful	1
Mostly Helpful	4	Somewhat Helpful	1	Unhelpful	1	Somewhat Helpful	3
Somewhat Helpful	1					Unhelpful	1
Unhelpful	1						

Of note for the discussion in Chapter Seven is that the OWC draft service was the only service for which some participants had no complaints, and the CS draft service was the only service with which no participants had a fully negative experience.

This table is a useful overview of participant perceptions by service, but more useful is the in-depth cross-case syntheses in the next chapter, where I consolidate patterns of perceptions by feature in order to answer my first research question for each service: "Which features of these writing assistance design options do fully-online students perceive as contributing the most and least to their growth as writers?"

CHAPTER SIX

CROSS-CASE SYNTHESES

While the email interview responses provided a descriptive profile for each of the 13 participants' perceptions of their experiences, revealing possible reasons for their perceptions (my second research question), the following cross-case syntheses present the interview results in a way that addresses my first research question, Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers? To answer this question more fully and follow Yin's (2012) principle of *replication logic*, I here offer OWC directors and designers a feature-by-feature synthesis of interview participants' perceptions of each service. Since this study involves multiple cases but not enough for a quantitative meta-analysis, Yin advises using cross-case syntheses as a way to address whether the findings of multiple cases "support any broader pattern of conclusions" (Yin, 2012, p. 17). Thus, while the profiles present the contexts and reasons behind each participant's perceptions and subsequent choices, the following cross-case syntheses present any ideas about each design feature that were replicated across participant profiles, revealing possible patterns of perceptions and choices on which to base future OWC designs for fully online students.

Methodology

For multi-case studies like this one with only a small number of cases, a good alternative to involving quantitative analysis in the act of synthesis is the "creation of word tables that display the data from the individual cases according to some uniform framework" (Yin, 2009, p. 156). While writing and rewriting the profiles of each participant's experiences with each service, I continually updated a running word table for each service with student perceptions of its design features, including ease of access, ease of use, timeliness, connectedness, feedback

usefulness, observance of OWI best practices, and helpfulness or hindrance to growth as writers. The OWI best practices category of each word table refers to the best practices for asynchronous and synchronous online writing instruction as outlined in the OWI Practice section of Chapter Two. Though participants did not know them as best practices, they answered survey questions based on those best practices (see Appendix B) asking them to rate tutors' feedback and interactions, and they mentioned many of those practices (or lack thereof) in their interview responses. Finally, after constructing these lengthy word tables in my case study database, I analyzed them for patterns in which the same reaction or perception occurred more than once per category and placed them into a final synthesized table for each service. In this chapter, I present the four final word tables (plus supporting interview and survey data) as my cross-case syntheses results for the two synchronous services first, concluding with the two asynchronous services. I occasionally repeat Chapter Five excerpts of participant interviews where relevant to give voice to their experiences for researchers who wish to read only the cross-case syntheses rather than the entire dissertation.

OWC Skype Service

The OWC's Skype option requires students to download Skype and submit a request for an appointment that includes all the possible dates and times they are available two days from the time they are submitting the request. For instance, if a student begins a Skype appointment request at 11:45 PM on a Thursday evening, the earliest time she may schedule would be 8:00 AM on Saturday morning. In other words, students have access to all time slots between 8 AM and midnight two days from the current day of submission. Joy (a straight-A junior seeking APA help, UB (a female graduate student with a writing disability), and Adrienne (a straight-A senior and self-proclaimed perfectionist) were the participants who used this Skype option—Joy twice,

UB 11 times, and Adrienne once. Table 18 summarizes where two or more of the three participants perceived a given feature of the Skype option in a similar way, followed by participant interview quotes and survey responses as supporting evidence.

Table 18

Skype Cross-Case Synthesis

Skype Cross-Case Assertions	Participants (3 total)
Convenience: Ease of Access	
The Skype option and its link was not easily accessible on the website.	UB, Adrienne
Convenience: Ease of Use	
Skype was easy to use once one I figured out how.	UB, Adrienne
Skype allows smooth communication between my tutor(s) and me when the tutor knows how to use it correctly.	UB, Adrienne
Convenience: Timeliness	
Making Skype appointments in a way that fits my schedule is difficult.	Joy, UB, Adrienne
The length of Skype appointments does not fit my needs.	UB, Adrienne
Connectedness	
A certain level of collaboration between me and my tutor(s) did take place on Skype	Joy, UB
I did not feel much sense of personal connection with my tutor(s) via Skype.	UB, Adrienne
Academic Improvement: Feedback	
My tutor(s) did directly address my writing weaknesses through Skype	Joy, UB
Sometimes the feedback was not thorough enough to be helpful.	UB, Adrienne
Academic Improvement: Best Practices	

The tutor(s) did not make permanent changes to my work but demonstrated suggestions and possibilities.	Joy, Adrienne
Growth Hindrance or Help	
The Skype service was helpful for my writing but having to schedule an appointment ahead of time was a hindrance.	Joy, UB

Skype Convenience

UB and Adrienne both stated similar negative perceptions of the Skype option, while Joy loved her experience and felt that the only drawback to the Skype service was the appointment requirement. On the survey, UB and Adrienne only somewhat agreed that the service was easily accessible. “I can barely see where the Skype option is offered,” Adrienne commented in her interview (Adrienne, R1i, p. 4). Both students also somewhat agreed that they spent more time focused on writing needs than on learning technology. Adrienne recalled, “At first I had trouble figuring it out since it was the first time I set up Skype. After fumbling a little I figured it out” (Adrienne, R1i, p. 4). Both she and UB agreed that Skype did allow smooth communication between them and their tutors when the tutors knew how to use it correctly. UB pointed out that some of her tutors did not know how to screen share the draft and should have known. Adrienne noted her tutor knew how to use the technology not only to screen share but also to send her links to helpful resources. All three Skype users found that making Skype appointments in a way that fit their schedules and allowed time for revision was difficult. Joy wished Skype appointments could be scheduled in a shorter time frame, UB felt the one-hour time frame was too limiting, and Adrienne initially perceived the one-hour appointment time was too lengthy, not realizing the appointment did not need to go the whole hour unless she needed it to do so.

Skype Connectedness

While Joy and UB somewhat agreed that they and their tutors collaborated on revisions, UB and Adrienne were clear on the survey that they did not feel a sense of connection, though neither of them expressed that such a connection was important to them. In fact, Adrienne purposely avoided connectedness in order to keep the tutor focused: "I did not want to ask questions and interrupt the tutor's review process. I just let the tutor do their thing" (Adrienne, R1i, p. 5). Joy described her experience positively: "The Skype session definitely made me feel like we worked together to help bring my work up in quality and content. I took a lot of notes!" (Joy, R1i, p. 5). In response to the collaboration question, UB said she and her tutors always "walk through the changes," leaving the word "together" implied (UB, R1i, p. 4).

Skype Academic Improvement

As to whether their tutor feedback was focused, helpful, and followed OWI best practices, two or more felt their feedback was focused; two or more felt the feedback was sometimes not as helpful as it could be; and two or more agreed that the tutors seemed to follow the best practices outlined on the survey. Joy saw her tutor as being focused on her formatting and grammar questions, and UB perceived her tutor as focused on her punctuation, agreement, and sentence structure issues. However, both UB and Adrienne perceived the tutor feedback as unhelpful—UB because she felt the resources recommended would not help her because of her disability: the tutor "sent me to the Purdue OWL. However, I do look at that services, but if my disability is writing then theses services do not help" (UB, R1i, p. 4); and Adrienne because she perceived her tutor as less serious about discussion board posts than she was after he commented that they "were an easy way to improve one's grade" (Adrienne, R1i, p. 5). Adrienne took up significant space criticizing that remark. As far as OWI practices, UB somewhat agreed that her

tutors followed each best practice, while Joy and Adrienne both noted in their interviews that the tutors were careful not to make permanent changes to their work but rather demonstrated various explanations and suggestions for identifying and correcting patterns of error.

Skype Hindrance or Help

Two of the three, Joy and UB, stated they found the Skype services to be helpful toward their growth as writers, but they admitted they would use it more if the appointment process were better.

CS Chat Service

The CS chat option allows students to connect with a tutor 24/7 in order to discuss their writing via a chat session while sharing a tutor-controlled whiteboard to which the student's paper is uploaded. The sessions are recorded and stored in a personal "locker" so the student may access and review them at any time. Students are allotted 20 hours total per semester to use on any CS service. Five interview participants claimed to have used the CS chat, but three of the five used it once for less than five minutes. Another used it only once but for more than a few minutes (Cassie), and the final participant (UB), who has a writing disability, used it for nine long sessions. Table 19 summarizes where two or more of the five participants perceived a given feature of the CS chat option in a similar way, followed by participant interview quotes and survey responses as supporting evidence.

Table 19

CS Chat Cross-Case Synthesis

CS Chat Cross-Case Assertions	Participants (5 total)
Convenience: Ease of Access	

The link to the CS was easily accessible.	Tanya, Cassie, UB, Patty
Convenience: Ease of Use	
The CS chat option's technology did not always function well.	Tanya, Cassie, UB
Convenience: Timeliness	
The CS chat fits well into my schedule	Cassie, UB, Adrienne
The CS chat does not fit well into my schedule	Patty, Tanya
Connectedness	
No clear pattern of responses for this feature.	
Academic Improvement: Feedback	
My tutor(s) did directly address my writing weaknesses through the CS chat.	Cassie, UB, Patty, Adrienne
Sometimes the feedback was not thorough enough to be helpful.	Cassie & UB
Academic Improvement: Best Practices	
No clear pattern of responses for this feature.	
Growth Hindrance or Help	
The immediate access at all times is a tremendous help, but the technology may sometimes hinder assistance toward growth.	Cassie, UB, Adrienne, Tanya, Patty

CS Chat Convenience

Four out of the five CS chat users described the service as easily accessible. Cassie wrote of her experience,

> When I open my [university] portal, [the CS] is one of the options on the left hand side, whereas the Online Writing center is not one of the options. It may have been lazy, but in

> the moment I just really needed the most available option. So since [the CS] was right in front of me, I was able to just jump on there first. (Cassie, R2i, p. 1)

Three out of five users noted the technology did not always function well. Tanya mentioned loss of connection several times: “The tutor chat was quite stressful to use. Sometimes it does not work properly, like we was talking and doing correction and then suddenly we lost the signal and I had to start over with another tutor” (Tanya, R1i, p. 2-3). Cassie commented, “Yes, it was easy to navigate. The only problem we encountered was when [the tutor] tried to screen share and it did not immediately work” (Cassie, R1i, p. 2). Even UB, who loved the CS chat option described technological issues: “the systems was hard to get use to in the beginning. Sometimes the screen for the other person are hard to see. There comments on the paper, you cannot see their comments until they type on the side of the screen” (UB, R1i, p. 3). UB further wrote that she frequently lost connection when using her tablet, though the CS claims to be mobile-friendly.

Three of the five perceived the CS chat as an excellent fit for their schedule. Cassie noted how her tutor “was immediately available to chat” (Cassie, R1i, p. 2), and UB wrote, “[The CS] schedule is wonderful. This fit in my schedule. I can go on at any time” (UB, R1i, p. 2). However, it’s worth noting that Cassie and Adrienne tried the service only once and therefore did not come up against the CS limit of 20 hours per semester—and neither had UB yet, who believed that her time was unlimited: “I like that you can spend as much time with a tutor” (UB, R1i, p. 5). The two CS chat users who felt the timeliness was not as suited to their schedules as the paper drop off felt so because the draft review used up their allotted hours more slowly than the chat. Tanya wrote that she tried the CS drop-off option after trying the chat: “I was able to save my time and got what I really need” (Tanya, R1i, p. 2). When asked to clarify if she referred

to saving her personal time or her allotted CS hours, she replied, “Both” (Tanya, R2i, p. 3) Patty also described the chat as “too time consuming,” explaining,

> Instead of sitting there on chat trying to correct my paper with the tutor, I had other things with in class or just in life in general to do because I work a full time job and am active in several ministries in church, along with ministering outside of work and church. So [the CS] draft review was better for me, I could submit then go back later to retrieve and review my results. (Patty, R1i, p. 1)

Thus, those who may need significant feedback may find themselves migrating to draft reviews once they discover the limit per semester on their usage and/or how long it may take them to communicate via typing back and forth with a tutor.

CS Chat Connectedness

Only two of the five commented on this feature, even with the follow-up questions asked, and the two who did comment held opposing perceptions. Tanya explained, “I do not feel any kind of working together, since I never get the same tutor twice” (Tanya, R2i, p. 3) while UB described how her tutors “walk through the changes” when they “highlight what they are looking at,” apparently referring to her draft on the whiteboard; she wrote, “Sometimes I can see the changes. On the other hand, I might struggle through what they looking at” (UB, R1i, p. 4). It may be that the chat users were so focused on using the technology or reading the tutor’s reply and thinking about how to reply that they overlooked any sense of connection/collaboration they may have felt. Apparently, for Tanya, collaboration and personal connection involved getting to know a tutor over time, which never happened for her since she switched to the draft drop-off service out of frustration with the chat service.

CS Chat Academic Improvement

As to whether their tutor feedback was focused, helpful, and followed OWI best practices, four out of five felt their feedback was focused on their expressed writing needs; two felt the feedback was sometimes not as helpful as it could have been; and no clear pattern of agreement emerged about tutors following OWI best practices. Adrienne asked for help about the use of "because" at the beginning of a sentence, and she said, "I asked for clarity on comments a tutor from [the CS] had put on my paper" (Adrienne, R2i, p. 5). Thus in her one chat, she sought answers to some follow-up questions she had about a paper a CS tutor had reviewed, and she did receive focused assistance for both of those questions. Patty described her tutor as "very clear and to the point when answering my questions about grammar and sentence structure" Patty, R1i, p. 5) and said her tutor improved her paper. However, though Cassie initially insisted that her tutor was "helpful and efficient," she told a different tale when asked to clarify her survey responses on which she disagreed that her tutor had clearly communicated helpful explanations:

> Basically, I think that my need for finding the way to correctly source the information was not easily communicated. So I don't think that she first understood my question, which is why I didn't strongly agree that she accurately interpreted my needs. But it could have been my fault, which is why I said what I did in the previous answer. I disagreed that she clearly communicated helpful explanations, because she didn't necessarily explain, but pointed me to a good website for such issues. (Cassie, R2i, pp. 2-3)

Cassie further admitted that this "good website" the tutor pointed her to in order to find the answer to her APA question did not contain the information she needed:

> I used the website that she shared with me to understand APA format better, but ended up not finding the exact need I had on that link. So I had to go outside of what the tutor shared to find a more specific answer. However, she got me started in the right direction and I got full rubric points. (Cassie, R1i, p. 3)

When asked to explain her satisfaction with the help she received, even though the tutor gave her a website that turned out to be unhelpful, Cassie explained,

> I am satisfied with the service because I truly knew that my question may have just been miscommunicated by me to the tutor. I was satisfied because I believe that she did her best to give an answer to my perceived question. I would recommend the service because I can trust, based on that experience, that the tutors do their best to understand and answer the question. (Cassie, R2i, p. 4)

Apparently, this tutor communicated that she really cared tried to understand despite being unhelpful, and that meant more to Cassie than receiving helpful feedback.

The OWI best practice results for this service are disappointing, as no clear pattern of agreement emerged about participants' perceptions of whether or not the tutors followed them. Three out of five CS chat users used the service only once for a few minutes and used at least one other service much more consistently; thus, they all responded more thoroughly about those other services. Of the remaining two, Cassie's experience is discussed above, where her tutor simply directed her to a website that turned out to be unhelpful, and UB wrote only of all her technological difficulties and the challenges posed by her disability rather than evaluating her tutors' approach. She only mentioned her tutors walking through changes to her paper with her, but did not mention what occurred during such a walk through. The five users' survey responses were wide-ranging as well, from all strongly agreeing (including that the service hindered

growth), to somewhat agreeing to somewhat disagreeing to strongly disagreeing about whether their tutors employed various OWI best practices.

CS Chat Hindrance or Help

The technology appeared to be the biggest hindrance (at times) and the immediacy of access appeared to be the biggest help mentioned by those participants who used the CS chat service. UB wrote of how the technology kept her from revising right away: “I usually see the mistake if they are highlighting them. But if it a difficult for me to correct the whole sentence if it needs to be re-writing. I will have to do it later since I cannot respond quickly” (UB, R2i, p. 5).

OWC Draft Review Service

The OWC’s draft review option allows students to submit a draft of any length for a full review, regardless of how long that review takes, once per assignment. Drafts of 10 pages or fewer are returned within 48 hours (often sooner), and drafts over 10 pages are returned within 72 hours (often sooner). The tutors are trained to open with a greeting and explanation of their approach; thoroughly comment throughout on each pattern of error (giving an explanation, example, and links to resources); and summarize strengths, weaknesses, and next steps. Drafts are always reviewed for all aspects: content development, style, research quality, grammar, punctuation, and formatting. Nine participants used the OWC draft review service—six females and three males, four graduate and five undergraduate students, one with a writing disability, one on academic probation, and several concerned with maintaining high grades. Table 20 summarizes where three or more of the nine participants perceived a given feature of the OWC draft review option in a similar way, followed by participant interview quotes and survey responses as supporting evidence.

Table 20

OWC Draft Review Cross-Case Synthesis

OWC Draft Review Cross-Case Assertions	Participants (9 total)
Convenience: Ease of Access	
The draft review service is not too difficult to access, especially with the widget.	Joy, Samuel, Lydia, Leslie, Victor, Patty, Adrienne, Celia
Convenience: Ease of Use	
The technology for the OWC draft review functions well and is mostly quite easy to use.	Joy, Samuel, Lydia, Leslie, Victor, Patty, UB, Celia
Convenience: Timeliness	
The OWC draft review service fits my schedule well.	Joy, Samuel, Lydia, Leslie, Victor
The OWC draft review service does not fit my schedule well.	Patty, UB, Adrienne, Celia
Connectedness	
I did not feel my tutor(s) and I collaborated on my work.	Leslie, Adrienne, UB
I felt a sense of connection with my tutor when I felt understood, encouraged, and/or the comments were personalized.	Joy, Lydia, Leslie, Victor, Patty, Adrienne
Academic Improvement: Feedback	
The tutor addressed my writing needs and often addressed additional issues.	Joy, Samuel, Leslie, Victor, UB, Patty, Adrienne
The tutor(s) provided feedback that helped improve my writing	Joy, Samuel, Lydia, Leslie, Victor, Patty, Adrienne
Academic Improvement: Best Practices	

The tutor(s) provided explanatory comments with examples and links to resources.	Joy, Samuel, Lydia, Leslie, Victor, UB, Patty, Adrienne
The tutor(s) sometimes provided summary comments and sometimes did not.	Joy, Samuel, Lydia, Leslie, Victor, Patty, Adrienne
Tutors did not add, delete, or change anything in my paper	Samuel, Patty, Adrienne
Growth Hindrance or Help	
Using this service has improved my writing, grades, and/or confidence.	Joy, Samuel, Lydia, Leslie, Victor, Patty, Adrienne
The turnaround time is often a hindrance to improving my paper in time to submit a revision.	Samuel, Patty, Adrienne

OWC Draft Review Convenience

Six somewhat agreed and two strongly agreed that the OWC draft review service was easy to access. Joy and Leslie both mentioned the widget: “The widget is nice since its right there when I log in and makes it easier to just click and go to the submission page” (Joy, R2i, p. 4) and “I saw the OWC widget on [the portal] page and believe it’s in a convenient location for students to see it, be reminded of its availability, and be able to access it quickly” (Leslie, R2i, p. 3). Samuel’s comment represents well the rest who were not aware of the widget but were thankful to learn of it: “At present, it takes me at least four links to access the writing lab. The actual Tutoring request link is difficult to find on the correct page” (Samuel, R1i, p. 2).

Eight out of nine participants praised the smooth process of the OWC draft review technology, including the email notifications, paper retrieval, and tutor comments, though two did mention initial difficulty with located their tutor review paper. Leslie wrote, “The first time I did not see my paper immediately, but discovered it a short time later” (Leslie, R2i, p. 3), and

Celia admitted, “I had a hard time finding my paper after it was reviewed” (Celia, R1i, p. 2). But Victor’s and Joy’s comments seemed to sum up the other comments of all eight participants: “I was not familiar with the technology, but it was easy to learn. I had no problems with the functions of the service. The communication between me and the tutors was always smooth” (Victor, R2i, p. 1) and “The email notifications and retrieval processes are all great. No problems ever. My experience with the technology was smooth. Everything functioned easily” (Joy, R1i, p. 3).

The nine participants who tried this service were split nearly right down the middle on the issue of timeliness, which explains the two contradictory statements on Table 20. The five of them who had used only the OWC agreed that the service fit their schedule well while the four of them who had also used one of the CS options disagreed that the OWC draft service fit their schedule—certainly a pattern worth noting. One of the five who viewed the timeliness positively, explained that taking “a minimum of 3 classes at a time” enables her to drop off longer papers for review at the OWC while working on shorter ones (Joy, R2i, p. 4), and another noted, “I’m off work 3-4 days at a time, so I turn my papers in on the first days I’m off by the time for me to return to work I have the feedback back” (Victor, R2i, p. 2). In essence, the OWC users made the longer turnaround time work for their school schedules. On the other hand, Patty’s comment sums up the timeliness issue for the users of both services: “Time consumption was my issue with this service, especially if I could only finish my work on a Thursday or Friday then it would not leave enough time for a turnaround to turn in work that Sunday deadline” (Patty, R1i, p. 2). The students who were unable to get drafts completed early enough understandably did not find the OWC 48-hour turnaround time suitable for their lifestyles.

OWC Draft Review Connectedness

The three OWC draft review users who mentioned collaboration did not view their draft reviews as collaboration, and the majority of this option's users did not rank connectedness as a priority on their survey responses. Leslie's comment demonstrates the primary attitude toward collaboration of this group:

> I submitted the paper and received feedback, so I did not view it as a collaboration. If I had sent follow-up questions or sent a revised paper, then I may have viewed is as more of a collaboration. I wanted the paper to reflect my work, so I did not want or expect a collaborative effort. (Leslie, R2i, p. 4)

However, their perceptions of whether they felt a personal sense of connection with their tutors were more positive, as six of the nine noted that they sometimes felt a sense of connection and sometimes did not, depending on the tutor. All six also mentioned that the cause of their sense of connection was feeling like the tutor understood their needs, personalized the comments, and/or made an effort to encourage them. Joy explained,

> I feel more of a connection when the comments made by the tutor seem to indicate they really read the paper and reviewed it as opposed to feeling like they just made corrections. I have had some reviewers make comments like 'that's a great way to make a point on that subject' or 'Well said' and those would probably be the papers I would place in the group where I felt 'more connected' to the reviewer. (Joy, R2i, p. 5)

Despite wanting to remain anonymous and avoid any sort of judgment, self-proclaimed perfectionist Adrienne noted the one time she felt connected to her tutor was when he said he had prayed for her:

> [His] prayer was timely. I had not seen other draft service tutors say they were praying for me until I read his comment. It was during a specifically stressful time and the verse & knowing I was being prayed for was thoughtful and VERY encouraging. (Adrienne, R1i, pp. 6-7)

Leslie seemed to base his feeling of connection on how engaged his tutors were:

> I did feel I connected with my tutors in that they understood my needs and provided me with the feedback desired. I felt they both were sincere in their wanting to help me and provided direction for me to improve my writing. I felt I was receiving advice from a knowledgeable friend and not an uninterested party that was just doing a 'job'. (Leslie, R2i, p. 4)

So despite not perceiving the draft review as a type of collaboration, most of the OWC draft participants did, at least sometimes, experience a sense of connection with their tutors.

OWC Draft Review Academic Improvement

Most of the nine participants agreed on aspects of the academic improvement feature of the OWC draft review, more than any other feature. Seven of the nine agreed that their writing needs were directly addressed and that the tutors provided helpful feedback, sometimes more than requested. Eight of the nine mentioned that the tutor(s) provided explanatory comments with examples and/or links to resources, and seven of the nine mentioned that tutors sometimes (but not always) provided summary comments to conclude the review. Joy noted, "The assistance I received matched with my request most of the time. The tutors used comments and links to help provide additional examples" (Joy, R1i, p. 4). Lydia wrote, "They helped with everything I needed help with and sometimes more feedback to correct the same consistence patterns throughout the paper" (Lydia, R2i, p. 3). Even perfectionist Adrienne agreed that her

reviews followed OWI best practices: “The tutors communicate well as they leave notes, summary, comments, links to resources” (Adrienne, R1i, p. 6). Victor enthused, “Very pleased with my final drafts because with the help I could see the overall improvement of my work. The writing assistance was very helpful because I could see the improvement in my work and it gave me confidence” (Victor, R1i, p. 3). Leslie described one instance as follows:

> [The tutor] provided good advice to improve my content and formatting. I agreed with some of her observations and rewrote several paragraphs providing additional support as recommended. This project was part of a larger business plan project so I had the opportunity to reflect on it for many days before I had to submit the final report. (Leslie, R2i, p. 5)

Three of the nine (Samuel, Patty, and Adrienne) noted that their tutors did not add to, change, or delete any aspect of their papers. In other words, the tutors refrained from appropriating the students’ writing, thereby encouraging the students’ ownership and engagement in their own writing: “The tutors have used comments to point out errors, make observations, and otherwise communicate with me on my paper. At no point has a tutor edited my paper nor given me a specific phrase to use in my papers” (Samuel, R1i, p. 4). Nearly all the users of the OWC draft review service had a mostly positive experience in terms of academic improvement.

OWC Draft Review Hindrance or Help

Given the previous statement and their own testimonies in interview, nearly all the OWC draft review users (seven out of nine) also felt the service helped their growth as writers more than hindering it. Leslie praised his results:

> My grades definitely improved by using the OWC draft review service. It not only improved my writing and formatting on the assigned topics, but the feedback I received

was such that I could apply it for subsequent assignments. I would have lost points on those too, if I had not received the detailed feedback earlier. (Leslie, R2i, p. 5)

Lydia's comment echoed Leslie's: "The tutoring experience help me to pass my classes and I am very satisfied with the results I received overall" (Lydia, R1i, p. 4). Victor wrote, "From 1-10 my satisfaction would be a 10. All the aspects were important to me, with the most emphasis on ease of access, ease of use, sense of connection, smooth communication of writing needs, and the quality of writing assistance" (Victor, R1i, p. 4)

Three of the nine (Samuel, Patty, and Adrienne) specifically mentioned the turnaround time as a hindrance, in addition to the other two who mentioned it as problematic in the "convenience" portions of the interview and survey. Samuel's comment seemed to sum up the consensus about the OWC draft review service:

> Overall, I am satisfied with my tutoring experiences. The feedback and direction the tutors provide make me feel far more confident in my final submissions. The tutoring is slightly inconvenient due to the two-day limit and website design. However, I appreciate the tutors' work and feel that the pros outweigh the cons. (Samuel, R1i, p. 5)

CS Draft Review Service

The CS draft review service allows students to submit drafts for review and points out errors, provides explanations and links to resources. The service operates under the "20 hours per semester" limit, which also includes time used for the CS chat service. Tutors may spend only 50 minutes per paper. Submissions must be completely anonymous, and papers over a certain word count may not be submitted. Reviews are returned within 24 hours, often sooner. They provide a summary page of comments as well as a tutor-reviewed draft (if the review is completed within the 50 minutes). Multiple submissions of the same draft are allowed but review time is charged.

Six interview participants had used the CS draft review service, three submitting two to three drafts each and three submitting 8-13 drafts each. Table 21 summarizes where two or more of the three participants perceived a given feature of the CS draft review option in a similar way, followed by participant interview quotes and survey responses as supporting evidence.

Table 21

CS Draft Review Cross-Case Synthesis

CS Draft Review Cross-Case Assertions	Participants (6 total)
Convenience: Ease of Access	
The CS link was easily accessible and prominently displayed on the university website.	Tanya, Greg, JD, Adrienne, Patty, Celia
Convenience: Ease of Use	
The CS draft review service was fairly easy to use the first time and very easy with repeated use.	Tanya, Greg, JD, Adrienne, Patty, Celia
The CS draft review needs clearer notification about certain issues.	Greg, JD
Convenience: Timeliness	
The CS's 24-hour (often faster) turnaround time for drafts fits my schedule very well.	Tanya, Greg, JD, Adrienne, Patty, Celia
Connectedness	
I do not feel that collaboration or connection occurred in using the CS draft review.	Tanya, Greg, Adrienne
I do feel that collaboration and/or connection occurred in using the CS draft review.	JD, Patty, Celia
Academic Improvement: Feedback	
My CS draft tutor(s) did directly address my writing needs and weaknesses in a helpful way, sometimes providing even more assistance than requested.	Tanya, Greg. JD, Adrienne, Patty, Celia
Sometimes the feedback on formatting was incorrect.	Greg, Adrienne, Celia

Academic Improvement: Best Practices	
The tutor(s) mostly follow OWI best practices.	Tanya, Greg, JD, Adrienne, Patty, Celia
Growth Hindrance or Help	
The CS draft review feedback helps boost my confidence and better my writing	Tanya, Greg, JD, Adrienne, Patty, Celia
The CS draft review time and word limits hinder my chance to grow as a writer.	Tanya, JD, Patty

CS Draft Review Convenience

The six participants agreed that the CS's draft review service was highly convenient in all aspects—ease of access, ease of use, and fit with schedule.

As to ease of access, the university prominently places the CS's link on the landing page all online students must use to access their courses, and several users mentioned this in their interviews. Four out of the six users found the draft review service very easy to use, and the other two found it easier to use after figuring it out the first time. Celia felt "the technology was fairly straightforward" (Celia, R1i, p. 2), and Patty's comment concurred: "Yes, very user friendly to use, functioned great for me" (Patty, R1i, p. 3). Both Adrienne and Greg mentioned having used similar technology before: "I was already familiar with using scroll down menus and attaching files. The website uses similar technology as others I've used" (Adrienne, R1i, p. 5). Greg and JD felt using the draft service became easier with repeated use. Greg wrote,

> I was confused at first about how to submit a draft to the tutoring service. The directions were not that clear and specific, however once I had completed the process the first time and was able to retrieve the paper it became much clearer to me. (Greg, R2i, p. 2)

And JD shared, “This has been the third time I have used the site and the first time it was fairly easy to navigate and each time after it has been easier” (JD, R1i, p. 2). However, Greg and JD also made three suggestions for better informing students about certain aspects of functionality. Greg suggested that students receive an e-mail notification “as soon as the tutor has completed the review” so students do not have to keep checking their locker to see when the paper has been returned. JD noted two issues—the required anonymity and the word limit. JD seemed to wish the site offered clarification on the CS’s anonymity requirement:

> The only part that left me feeling uncomfortable was the popup warning to not include my name or what university I was attending. This left me wondering where my paper was going and who would have access to it. With the safe assignment program that checks for plagiarism, the last thing I wanted to worry about was someone taking my research and using it for their gain and possibly causing my assignment to be flagged for content. (JD, R1i, pp. 2-3)

JD also wished for better notification on the draft review services’ word count limitation:

> The only issue I had was when I submitted a paper over 15,000 words and logged off without realizing I had exceeded the limit. The next day I still had not heard back, which is rare, so when I logged on and it showed no record of the submission I panicked. It was only after trying to resubmit the same paper again when I noticed the small popup that there was a word count limit. This would have been nicer if a log showed a failed attempt instead of just showing no record. (JD, R1i, p. 3)

Other than these three suggestions, all six users felt the site and draft submission process were easy to access, easy to use, and above all, fit their schedule extremely well because of the 24-hour (often sooner) turnaround time. Celia recalled, “my paper came back very quickly, always

less than 24 hours ☺“ (Celia, R1i, p. 2) and Patty wrote that the CS is “quick on returning feedback in a timely manner, fit my schedule perfect because I could submit drafts anytime of the day or night” (Patty, R1i, p. 3). JD’s comment agreed: “The convenience and quick turnaround time allows me to often resubmit the paper again to have another set of eyes review it, which leads to an even higher score each time” (JD, R2i, p. 6). Only Greg, who was also pleased with the turnaround time, pointed out what he perceived as a negative side effect: “[I am] extremely satisfied with the turn-around time, however some of the tutors may be rushing and their work is lacking in quality” (Greg, R1i, p. 3). Despite this observation, all six users agree that the CS draft review hits all the marks for convenience—ease of access, ease of use and timeliness.

CS Draft Review Connectedness

The six users of the CS draft review were divided right down the middle on whether they believed collaboration and a sense of connection occurred with their draft reviews. JD, Patty, and Celia felt their tutors offered understanding and positive comments that made them feel connected. Patty wrote, “I felt a sense of connection to the tutor because I believe they understood why I made the grammar mistakes that I did” (Patty, R1i, p. 5), and Celia noted, “I felt like my tutor tried to connect with me, on a personal level, by complimenting their likes of my papers” (Celia, R2i, p. 3). JD offered this praise:

> I really feel that [the CS] offered the best insight regarding what I could do to make my paper better and this was measurable considering I scored 8 points higher on the assignment when they collaborated on it. I think it came down to the personal comments within the paper and the encouragement that was offered and the positive/constructive critique of the work that established that connection. (JD, R2i, p. 5)

The common thread for these three users seemed to be understanding and encouragement. However, Tanya, Greg, and Adrienne—who did not prioritize connectedness as important—had different perspectives. Tanya wrote that she did not feel any sense of collaboration because she never had the same tutor twice. Adrienne felt the tutors' feedback was helpful, but did not view it as collaboration:

> However, it is still more of the tutor communicating to me. When I input questions, I'm not sure if the tutor will understand it when they read it. Plus, I don't want it to deter from them doing a thorough review on my paper. (Adrienne, R1i, p. 5)

Adrienne did not view herself as an integral part of the process but rather wanted to stand apart and allow the tutor to instruct without distraction. Greg's comment was similar; he did not view the draft exchange and resulting revisions as collaboration or connection:

> The communication between the tutor and myself was minimum. I basically submitted the paper and looked at the recommendations and made changes. Other than that there was no interaction. I cannot say I felt any sense of connection and like previously mentioned I had mixed feedback on the quality of the responses. (Greg, R2i, p. 3)

Thus, variables such as whether the tutor is understanding and encouraging and whether the students themselves prioritize collaboration may affect their perception of the interaction over their drafts.

CS Draft Review Academic Improvement

All six participants had at least one positive experience with this service where their writing needs were directly and helpfully addressed, though three of them also mentioned times when they received unhelpful or incorrect feedback as well, particularly when it came to formatting citations and references. Though she was satisfied overall with her CS draft reviews,

Adrienne noted, “They do not catch everything. I have caught errors that they didn’t point out, especially APA” (Adrienne, R1i, p. 7). Celia, who had very pleasing experiences as well, recalled, “I did follow one tutors review of waiting until the end of a sentence to cite but it was not correct in that particular instance” (Celia, R1i, p. 3). Of Greg’s two CS draft reviews, he said his first experience was “good” but then wrote,

> The second experience the tutor seemed to know less than I did. Turabian was a new format for me being a transfer student and was used to formatting papers in the MLA Style. I was also interested the second time in more grammatical assistance. I submitted a paper in the second case using the suggestions of the tutor and based upon the comments made by the instructor I would have been better off going with what I had originally written. I also had a local tutor for the Seminary Program, who agreed that the original text was better than the corrected text. (Greg, R2i, p. 2)

However, the other three users had nothing but good to say, including references to OWI best practices which all six on the survey either “somewhat” or “strongly agreed” that they observed. Patty enthused, “Without their assistance I believe my grade would have been lower, my grades on my assignments were very high, summary feedback was extremely helpful and they even added website links for further clarity” (Patty, R1i, p. 5). Tanya wrote, “They give me several websites that has grammar and punctuation teaching. Sometimes they make the changes and explain what was wrong, but the major of the times they market what is wrong and give me suggestion of how to correct” (Tanya, R2i, pp. 2-3). JD gave specific examples:

> I loved the format the assignment came back in. It was easy to print off and go item by item with constructive feedback available on each item. The tutor stated not only what, but also why and offered insight on how to make the paper flow better. I would say I am

> a better writer after every paper. [The CS] has opened my eyes to things I would not have considered like writing a proper introduction and making sure the conclusion summarizes and verifies what the paper set out to do. (JD, R2i, pp. 5-6)

CS Draft Review Hindrance or Help

As the preceding section shows, all six users experienced draft reviews that they perceived as extremely or satisfactorily helpful to their growth as writers, and as with the previous section, three of those users mentioned hindrances (in addition to the occasions of incorrect feedback). Tanya, the English language learner, stated, "I am very satisfied with the tutor help. I know without this kind of assistance will be almost impossible for me to do my papers" (Tanya, R1i, p. 3), but she also noted,

> There was sometimes the tutor did not review my entire paper like was suppose, for example I sent the 2 pages document and the tutor sent it back saying that he or she just have time to correct 2 paragraphs, and this paragraphs did not have much corrections, I felt something was wrong. (Tanya, R1i, p. 3)

JD said that he was pleased about every aspect of the service except the word limit on draft submissions, and Patty wrote that she was very happy with every aspect except the 50-minute time limit on paper reviews as well as the time charged even when the tutor did not have time to finish reviewing her paper:

> I was not very happy because I have a set amount of time allotted to me each term – 20 hours for two classes, and when I submitted a paper for draft review and the tutor stated they did not have time to finish, 50 minutes was still charged against my time and if I submitted again then another 50 minutes was charged against my time. I think that if the tutor doesn't have time to complete the review then they should send it back to me and I

> could resubmit without having 50 minutes charged against me since they could not complete the entire task. (Patty, R2i, p. 3)

However, the remaining three users concluded on positive notes, particularly pointing out their change in confidence level. Celia shared, “Their compliments helped boost my confidence so I wasn’t ‘scared’ when writing my papers. I was definitely impressed with [the CS] and will continue to use it throughout my university experience ☺“ (Celia, R2i, p. 4). The perfectionist Adrienne wrote,

> Where the services proved to be most valuable was in confidence and motivation. Also, it helps me create submission deadline goals so that I can complete my assignments before the due date. In addition, sometimes I get ideas on corrections or adjustments I should make just by submitting the draft even before I get the reviewed draft back. (Adrienne, R2i, p. 9)

These comments speak to the value of having an academic audience before submitting papers for a grade, forcing students to look at their papers through the eyes of someone other than themselves.

Chapter Summary

In this chapter, I present a cross-case synthesis for each of the four services, providing a summary of patterns where multiple participants held similar perceptions about a given feature that either helped or hindered their progress as academic writers. These patterns provide the basis for conclusions I draw and recommendations I make in the next and final chapter. The cross-case syntheses reveal patterns relevant to OWC design, online tutoring practices, OWC directors, and future researchers in related fields.

CHAPTER SEVEN

DISCUSSION

At the outset of this study, I hoped to gain a better understanding of these students' perceptions of what truly works and what does not in order to help them grow as writers. I wondered what the larger number of survey takers might reveal about these four writing assistance options. I wondered what the smaller number of 13 interview participants would write in response to the first round of interview questions. Conducting this study as my first, I was curious yet fearful. Would participants' descriptions be robust enough? Would they provide enough detail? Would they tell me only what they thought I wanted to hear as the director? None of these fears became reality. I hoped to answer my study's research questions in a way that would accurately portray these students' experiences and voices in a real and rich way in order to add them to the ongoing conversations about OWC design and online writing instruction. I hoped to offer some implications for scholars in the field and OWC designers who serve or will be serving fully online student populations, even with the understanding that variables may differ in their contexts and populations. I hoped my data would provide insight into the theories and practices described in past years of related scholarship. I dare to say that all of these hopes have become reality.

In this study, I aimed to answer to two main research questions:

1. Which features of these writing assistance design options do fully online students perceive as contributing the most and least to their growth as writers?
2. What are the reasons for these perceptions?

Findings indicated that answers to question one largely depended on answers to question two. Participants' priorities, academic goals, writing needs, life circumstances, personalities, and

technological comfort levels all affected their perceptions of OWC design features as most or least helpful, but some patterns worth a second look did emerge. For instance, findings indicated that participants tended to prioritize convenience over academic progress and consider connectedness a relatively low priority when seeking writing assistance. Findings also showed that most participants preferred asynchronous writing assistance to synchronous and perceived growth in writing skills when tutoring was more authoritative and explicit.

In this chapter, I present the implications of these findings and others, as ascertained from the 589 survey takers, the 13 individuals who shared their stories, and the holistic pictures painted by cross-case syntheses. Those individual profiles describe the perceptions of 13 very personal and unique experiences, yet clear similarities emerged across all of them that echo the survey findings and at times complicate or confirm ideas in the literature. In the following sections, I discuss implications of my findings for OWC design, for online tutoring theory and practice, for OWC directors, and for future research. In so doing, I repeat pertinent participant experiences from previous chapters for those who may choose to read only this final chapter.

Implications for OWC Design

Having an inviting and user-friendly website may be a bonus that draws a few more students in, but for both synchronous and asynchronous options, the amount of time needed to use them may be either the most helpful or the least helpful feature for convenience. These students have parenting and spouse responsibilities, careers, elderly parents they are caring for, church ministries, volunteer work, and all sorts of other demands on their time. Most often, online programs and classes are condensed from 16-week classes to 8-week classes while requiring the same amount of work, and the students often take more than one course at a time. They are the non-traditional online learners Hewett (2015b) describes. The faster they can

receive the highest quality of assistance, the better that option will be for most of them. How do convenience considerations hinder students' growth as writers? On the survey, 33% of those who had not used either service indicated that they did not have time to do so, and another 5% made comments in the "other" textbox related to lack of time. Students cannot begin to improve their writing skills without choosing to use writing assistance in the first place, and they will not make that choice if they do not have the time.

Asynchronous Time-Related Design

Though it may have already been a foregone conclusion, faster turnaround times for asynchronous assistance were the most helpful for these fully online students while slower were the least helpful. That revelation is not shocking in the least and bears out in the many comments non-users, OWC users, and CS users alike made throughout the course of the study. Some of the comments from non-users of either service included these:

- "Being a fulltime teacher and taking online classes made it too difficult to finish the writing projects far enough in advance to allow me time to submit my work and get a reply in time to do what I needed to do to turn in my assignment without penalty for a late assignment" (survey 155).
- "I work three jobs and often only have so much time to begin with but would love to take advantage of it if I could" (survey 392).

Celia, who had used both the OWC and CS draft reviews, criticized the one and praised the other: "I had a hard time finding my [OWC] paper after it was reviewed and took two days for revision, which didn't quite fit my time schedule. [The CS] was very easy to use and my paper came back very quickly, always less than 24 hours ☺ " (Celia, R1i, p. 2). Adrienne, the self-proclaimed perfectionist, went so far as to admit that she did not have time for the OWC's

method of pointing out, exemplifying and explaining all her patterns of error and marking them "Apply Throughout" if there are more instances of them in the paper. Adrienne wrote: "The OWC's method is to point something out then we are to 'apply throughout.' The turnaround time does not allow for enough time for me to go through my paper thoroughly and 'apply throughout'" (Adrienne, R1i, p. 7). Thus she deemed the OWC tutoring approach as part of the cause for her lack of time.

Price et al. (2007) studied students in a particular online course and their preferences of f2f course-embedded tutoring over online course-embedded tutoring. Not surprisingly, they found students preferred fast feedback: "The speed with which queries and assignments are returned affects the perceptions of the quality of tutoring support" (p. 17). Hence, they assert that though speed is not, in reality, connected to the quality of tutor feedback and instruction, it affects students' perception of the overall quality of the tutoring service. Monroe (1998) mentions a 48-hour turnaround time for full paper reviews (p. 4). Brown (2000) mentions a 24-hour turnaround time (p. 25), but the OWC encountered limited use—only 773 sessions in one school year (p. 26). In addition, these online services were extensions of onsite centers serving onsite students. So what is a possible solution for those of us who do not have the funding for an army of tutors in every time zone on every shift and who are serving a large fully online student population? One of the interview participants made an excellent suggestion—so excellent that I knew I should have thought of it during the design stages. Samuel suggested allowing students two options for turnaround times—a 24-hour return for targeted draft review that allows the student to choose two categories for feedback (like grammar, style, organization, etc.) or a 48-hour return for a full paper review. That way, students have more ways to fit the OWC draft

service into their hectic schedules but do not lose the option of receiving a full review of longer papers if needed.

Synchronous Time-Related Design

My findings indicate that having to make an appointment ahead of time is the least helpful synchronous option while 24/7 access is the most helpful. Again, this is not surprising news, and again, the commercial service easily bests the OWC in convenience. Cassie wrote of the CS, "The most encouraging and positive part of the entire experience was how quickly and easily I could specify my need and then see that I would be helped quickly" (Cassie, R2i, p. 2). Patty concurred about the CS: "I spend more time using them, they are quick, give great and helpful extensive feedback, encourage me in the areas that I did great in and can obtain assistance from them at any time (especially with short notice)" (Patty, R2i, p. 5). Those who tried the OWC Skype appointment found it very helpful except for that annoying appointment requirement. Joy shared, "After using [the Skype option] I wish it were easier to schedule. By easier I mean that it could be scheduled in a quicker time frame" (Joy, R1i, p. 2). And UB, the participant with a writing disability, was the one to simultaneously praise the CS and criticize the OWC about immediacy or lack thereof: "The Skype services has been helpful for me but I do not use it that often because you have to schedule an appointment" (UB, R1i, p. 5). She went on to write, "[The CS] really has help me to improve my papers. I like that you can spend a much time with a tutor" (UB, R1i, p. 5). At the time, UB had not discovered she was limited to 20 hours per semester since she had only recently learned of the CS's existence. She had scheduled very lengthy appointments.

On listservs and at conferences, online tutoring coordinators discuss the best and worst scheduling software, but OWC design literature has been nearly silent on appointments.

Shewmake and Lambert (2000) mention set appointments. Price et al. (2007) found in their study that students preferred set appointments with a specific start and end time; the authors speculated this preference was due to students' familiarity with f2f appointments. These centers were, however, using online tutoring to serve on-campus students. No one, to my knowledge, has written about the best way to provide synchronous tutoring for fully online students in a timely way. Centers who serve much smaller populations of students should be able to provide nearly instantaneous appointments, but those serving larger populations must either be creative or somehow secure funding to outsource to a 24/7 commercial service. Round-the-clock access is most likely the one feature no institutional writing center would be able to provide.

Technological difficulty was a second least helpful convenience factor for synchronous users. CCCC's (2013) OWI Principle 2 states, "An online writing course [or tutorial] should focus on writing and not on technology orientation or teaching students how to use learning and other technologies." Of this principle, Hewett (2015a) writes, "It must be clear that OWI teachers and students alike do not need to be technology experts, computer programmers, or Web designers to accomplish the instructional purposes of an [online writing course or tutorial]" (pp. 45-46). The CS apparently falls short in this area, since at least three participants mentioned having technical difficulties connecting or staying connected to the CS chat service. According to Hewett (2015a), more time in a tutorial should spent on writing instruction than on technological issues. Tanya (the multilingual participant) wrote of the CS: "The tutor chat was quite stressful to use. Sometimes it does not work properly, like we was talking and doing correction and then suddenly we lost the signal" (Tanya, R1i, p. 2) She added the following description of her struggles:

> Sometimes it took too long to be answered by the tutor, another times, the tutor took so much time asking me questions about what I think it was wrong. If I need help, I think is because I do not know the answer. The technology was easy to use, but it did not function well. I experienced several signal lost and I had to start over with another tutor. The communication could be faster, it was not in real time like when we are chatting on the web. Sometimes I though they are helping more than one person at the same time. Also, because I was using the chatting model I expected the tutor to be more agile in help me. I felt sometimes they are only try to get more time procrastinating the answer. (Tanya, R1i, p. 2)

She concluded this mild rant by admitting, "Then, I started to use more the 'drop off' mechanism, so I was able to save my time and got what I really need" (Tanya, R1i, p. 2). She stopped trying to use the CS Chat and switched to the CS draft review to save both her own time and her allotted 20 hours of CS time. The way OWC designers can mitigate such issues is to choose a technology that works more frequently than it does not, testing it often before purchasing it and before launching it. They should choose one that works from multiple devices, even with a poorer connection. Finally, they should try to choose or create one that they can control rather than having its servers and functionality in the hands of others.

Implications for Online Tutoring Practices

In addition to revealing the above design implications, my study's findings confirm OWI theory and practice even as they complicate decades of writing center literature geared toward on-campus learners and online tutoring literature focused on those same learners. Particularly, my findings indicate that prior emphasis on collaborative learning and minimalist tutoring as found in writing center literature may not meet the writing needs of fully online students.

Encouragement Versus Collaboration

Connectedness—a sense of collaboration—is, on the whole, not a feature fully online students value in their writing assistance, according to my findings. Not surprisingly, the CS users valued connectedness 8% higher than those who had not used either service or those who had used the OWC, though all three groups consistently ranked connectedness as a lower priority than convenience and academic progress. According to the interview participants, they do not look for connectedness when seeking writing assistance. They look for more of an audience than a collaborator--someone who can give them feedback or fix their writing, or another pair of eyes. One self-conscious participant even preferred anonymity. Adrienne wrote of the OWC, "I don't like that it is not anonymous because then I feel like people will judge me if I make the same errors that may have been corrected by that tutor before. Although, it is good they know my name if they're praying for me. ☺" (Adrienne, R1i, p. 4). She went on to state that she preferred the anonymity of the CS whose paper "drop-off" service asks users to remove all identifiers before submitting. Leslie directly stated that he did not view what occurred asynchronously as a collaboration because it was a one-time communication on both ends, but he also stated that he "did not want or expect a collaborative effort and looked for guidance on presentation aspects" (Leslie, R2i, p. 4).

According to Hewett, however, the less-collaborative nature of asynchronous OWI has specific benefits for student writing and revision. She notes that a student in synchronous or face-to-face conference with a tutor "may intuit a personalized reaction to his writing, and a student who conferences with his professor may simply desire to please the professor in order to gain her approval" (2002, p. 7). Hewett thus feels that benefits of asynchronous OWI include removing the personal, which gives "the response a more impartial and objective view that may be more

palatable" and allow more time for a student to "make decisions about her writing without the pressure of an immediate audience" (pp. 7-8). These statements reveal Leslie's and Adrienne's attitudes toward connectedness or its absence.

Though fully online students do not prioritize connectedness in any true sense, they do want to be encouraged; it is what apparently gives them a sense of connection even if that is not their priority. Leslie followed his above comments about not wanting collaboration with these words, acknowledging that he did feel a sense of connection with his OWC tutors:

> When [the first tutor] was first assigned to my paper he introduced himself and spelled out exactly what he was going to do and what he was not going to do (edit the paper). I like the personal touch as I felt I was connecting person-to-person rather than with a department of the university. Like [the first tutor], [the second tutor] introduced herself and she identified the tutoring policies she would follow. She evoked confidence in her writing, but also conveyed a caring persona which felt like she was helping as a trusted friend and not as a job. (Leslie, R1i, p. 4)

Leslie's words reveal the effects of Hewett's (2015b) recommendation that asynchronous responses include a personal greeting, frequent use of student's name, and cues of attentiveness, interest, and encouragement (pp.132-134). Adrienne also noted the caring approach of one of her OWC tutors:

> Drew's prayer was timely. I had not seen other draft service tutors say they were praying for me until I read his comment. It was during a specifically stressful time and the verse & knowing I was being prayed for was thoughtful and VERY encouraging. (Adrienne, R2i, pp. 6-7).

Others made mention of such engagement by the CS tutors. JD acknowledged,

> It can be real easy to get offensive when someone critiques your assignments, but each tutor delivered the feedback with such positive encouragement that it didn't feel abrasive. I think it came down to the personal comments within the paper and the encouragement that was offered and the positive/constructive critique of the work that established that connection. (JD, R2i, p. 4-5)

Celia praised the CS thusly, "My experience, in its entirety, was great. I felt like my tutor tried to connect with me, on a personal level, by complimenting their likes of my papers. The comments were very qualified and conceivable" (Celia, R2i, p. 3). Celia considered compliments of her writing as a form of personal connection.

In addition to the positive impact of encouragement and engagement, having the same tutor many times may also create a sense of connection, as another participant noted. Over the course of 54 reviews, Victor had seven different tutors, but he had the same tutor for 26 of those reviews. Victor enthused,

> The communications was great and after having the same tutor most of the time I felt there was a personal connection there . . . having the same tutor I understood the feedback easy and the tutor could see my areas of improvement. They also seem to see where I was trying to go with my papers and because of that I felt a connection with them. (Victor, R1i, p. 2)

Some institutional OWCs, like Shewmake and Lambert's (2000), allow students to look at a tutor's schedule and choose that tutor or another tutor who fits their schedule (pp. 163-164). Many commercial tutoring services allow students to select a favorite tutor and return to that tutor every time they want assistance as long as that tutor is available. Other institutional online centers, like the OWC in this study, must accommodate a large number of tutoring sessions and

may be unable to guarantee the same tutor for each session a student needed but could try as much as reasonably possible to do so. An added benefit to keeping students with the same tutor is the ability of that tutor to track the student's academic progress and growth as a writer.

Therefore, and to summarize this section, collaboration and connection are the lowest priority for fully online students seeking writing assistance, but they certainly appreciate any effort to make a connection through encouragement or compliments. The implication here is that the attitudes of fully online students toward connectedness contradict Kastman-Breuch's (2005) argument that the Burkean Parlor should be repurposed for online writing centers to communicate ideas of collaboration and community in keeping with f2f best practices as advocated for by North (1984), Lundsford (1991), Shamoon & Burns (1995), and Coogan (1999). Instead of focusing on how to make online writing centers more collaborative, directors can embrace the tenets, theory, and recommended principles for online writing instruction to ensure fully online students have opportunities to improve their writing skills permanently.

Directive Versus Minimalistic

Findings in my study also confirmed OWI recommended practices while it refuted writing center literature's emphasis on non-directive, minimalist tutoring, dating all the way back to North's (1984) seminal work. Since online tutoring literature primarily focuses on OWCs assisting on-campus learners as extensions of on-campus writing centers, much of its recommended practices are carried over from writing center literature; however, my study's fully online participants found OWI recommended practices more useful.

The most helpful aspect of these asynchronous services the 13 interviewees mentioned repeatedly was the tutor directly addressing all of their expressed writing needs and then surprising them with more helpfulness than they had asked for. Many even gave specific

examples of the kind of assistance they received—very precise and direct comments on what needed to be changed, why, and even a model of how. These methods fit those Hewett (2015b) and other OWI scholars advocate as the most effective. Hewett and Ehmann (2004) say asynchronous draft review strategies should include identifying error patterns, modeling corrections and revisions, suggesting helpful references, resisting the urge to over-comment, and using formatting tools strategically (pp. 79-85). Hewett's (2015b) results regarding online feedback indicated that "direct speech" acts are significantly more effective for OWI; thus, "explanations, assertions, commands, and questions" result in accurate revision more often than suggestions (p. 117). Hewett feels that encouraging ownership and avoiding appropriation at the expense of student learning is particularly harmful to OWI: "My experience is that OWI instructors need to intervene more directly to be effective. Without careful but explicit and direct instruction, online instructors essentially are handicapped in the ways they can respond that will prove helpful" (p. 84).

Nearly all the participant responses demonstrated a disinclination to seek writing assistance that does not directly address their needs in a meaningful and helpful way. Some participants specifically mentioned explanations, examples, links to helpful resources, and being able to place their papers next to the tutor's comments and fix their papers comment by comment. Lydia and Leslie commented on the feedback they enjoyed from the OWC. Lydia noted, "They helped with everything I needed help with and sometimes more feedback to correct the same consistence patterns throughout the paper" (Lydia, R2i, p. 3). Leslie described his pleasant surprise: "Based on my directions, I expected that only the APA portion would be addressed. I was delighted that he had reviewed my whole paper and left me many worthwhile observations to consider" (Leslie, R1i, p. 3). Celia and Adrienne offered similar praise for the

CS. Celia gave a specific example of an asynchronous comment on one of her drafts: “The tutors really helped me understand why things in my paper needed to be revised. For example, I wrote ‘are’ and it should be ‘is.’ I was advised to read aloud the sentence with each, which immediately made me realize which way was correct” (Celia, R1i, p. 2). Adrienne had words of praise for the organizational structure of her review: “The tutors communicate well as they leave notes, summary, comments, encouragement. It helps that the website has a separate links for summary, original document and revised document” (Adrienne, R1i, p. 6).

While direct and detailed comments were the most helpful contribution to these students’ growth as writers, the least helpful aspect they observed was a lack of consistency among tutors of both services. Some OWC tutors provided a summary of strengths, areas for improvement, and next steps while some did not. Some CS tutors were apparently inconsistent in their knowledge of format styles such as APA or Turabian. Greg told of his second experience with the CS, in which he sought help with Turabian style: “The second experience, the tutor seemed to know less than I did. I submitted a paper in the second case using the suggestions of the tutor and based upon the comments made by the instructor I would have been better off going with what I had originally written” (Greg, R2i, p. 2). Greg was “Extremely satisfied with the turn-around time” but felt “some of the tutors may be rushing and their work is lacking in quality” (Greg, R1i, p. 3). Tanya spoke of her revision practices: “I usually follow the tutor advice, but sometimes they make mistakes about the APA format, then I just ignore the advice regarding the APA format” (Tanya, R1i, p. 3). A few participants recalled being give incorrect information that cost them points, which not only bothered them because of the points lost but also because it detracted from their ability to rely on the tutors as experts, which they clearly did or wanted to

do. Lydia wrote, “There was never a time I ignored anything because I believed they were the experts since it was requested to use through [the university] facilitators” (Lydia, R1i, p. 3).

This perspective aligns with survey results regarding tutor preferences. All groups of participants in the survey preferred a tutor with a degree in English or writing above everything else. Exactly 50% of 460 survey takers ranked this type of tutor as first preferred, and 24% ranked it as second preferred. These results tell us that fully online students value knowledge in the field above any other aspect, regardless of whether the tutor is an insider or outsider. Shea’s (2011) study of faculty tutors versus peer tutors within an asynchronous OWC found that students (only three participants) said it seemed faculty tutors knew more about what their professors were looking for than peer tutors, but these students knew which tutors were faculty which could have influenced their impressions (Shea, 2011). This study result showing students prefer seeing tutors as the authority and find that idea helpful supports Hewett's cautions against privileging social construction theory in OWI: Social construction also privileges mutual or group authority over instructor/tutor authority, which again, Hewett (2015b) views as problematic for OWI. “There is an attempted leveling of instructional hierarchy that is intended to strip from teachers any pretense at authority, yet that authority is always obvious in their duty to evaluate and grade student writing,” she notes (p. 88). “For online tutors, a different authority—that of having specialized knowledge about writing—is difficult to hide, but some attempt to do so anyway in order to link contemporary practice with theory” (Hewett, 2015b, p. 88). This attempt to adhere to f2f tutoring theory is not helpful for students learning to improve their writing skills online—a direct approach is best, as these participant testimonials bear out.

Recommendations for OWC Directors

In addition to the above implications for design and practice, other recommendations for OWC directors presented themselves as I read and re-read the survey results, profiles, and cross-case syntheses. Some may seem as if they should have been self-evident without this study, but having confirmation helps. Others were somewhat unexpected, as least to me.

Intentional Marketing

Just as fully online students' growth as writers may be hindered by a less-than-enticing speed of service, so too might it be hindered by a lack of awareness that the writing assistance exists in the first place. Seems so simple when written out like that, but I was truly amazed by how many different ways the 13 interview participants had learned of their selected services (and still some possibilities were left off the list). My surprise was in part due to how many years I initially struggled to make new online students aware of the OWC, having to jump through the all the many hoops required to send a mass email to the entire online student population, most of whom did not read it. But in reading through the participant profiles, I counted seven different ways participants had learned about one or both of the services: by website design, instructor email to the class, the early intervention email, the required introductory orientation course, in the learning management system, from an advising or admissions counselor, or through a webinar offered twice per semester. And those do not even include the other ways they could have discovered the services, like the OWC widget as an option for customizing their student home page, military or enrollment newsletters, my video interview with Online Student Life, promotional videos on Yammer (the university's social media site), and so on. I had not even realized how many marketing venues I had been able to add over the years.

Yet even with all those venues, I was further amazed that 18% of non-users of either service noted on the survey that they were not aware of the services' existence; 43% of the OWC users were not aware of the CS's availability; and 11% of the CS users were not aware that the OWC existed. Fully online students cannot see posters in the halls or cafeteria or notice announcements flashed on strategically placed monitors throughout campus. They cannot pick up a flier at the Writing Center booth set up during special campus events. Moreover, if the body of online students is particularly large, as with this university (90,000), then mass emailing them may not be permitted or effective due to the enormous bulk of university email they already receive. Just as directors must be inventive in spreading awareness of on-campus writing centers, these participant profiles demonstrate that OWC directors must also be intentional and creative in spreading awareness of writing assistance options to fully online students. Making any kind of students, let alone fully online students, aware of online writing support is an area that, as far as I can tell, OWC design literature has yet to address.

As Many Options as Possible

Table 16 in the Chapter Five summary is a perfect picture of the wide diversity possible among fully online students, the age range being what most distinguishes this group from traditional on-campus students. The variety in age, gender, and degree programs is to be expected, but the variety in writing needs and academic identities somewhat surprised me because I had not specifically tried to find students with disabilities or students on academic probation or straight-A students or perfectionists. I did try to ensure I included at least one English language learner, but that was about all the diversity I had access to on my survey demographics, yet suddenly I had almost every type of student represented without fully intending to. This assortment had experiences with the four services that were almost as different

as each participant, and each found a service (or two) they liked for different reasons. The obvious conclusion is that the ideal scenario for providing fully online students with writing assistance that meets all their needs would be to provide as many options as possible.

The OWI Committee's Principle 13 (2013) states, "OWI students should be provided support components through online/digital media as a primary resource; they should have access to onsite support components as a secondary set of resources." Essentially, this principle requires that any form of support (orientation, training, writing support and research assistance) be offered to students online, in the modality to which they are accustomed, with onsite resources as a second option (Martinez & Olsen, 2015, p. 190). Martinez and Olsen (2015) assert, "This guideline suggests that students who meet asynchronously through the LMS should have asynchronous tutoring available, while students who meet synchronously should have synchronous tutoring available. When possible, having both modalities available is helpful to learners with varied preferences and access needs" (p. 190). Mick and Middlebrook (2015) concur: "The emerging consensus regarding the choice of asynchronous and synchronous modes is that neither is inherently better, but that they complement one another and should be employed after considering the instructional and rhetorical situation" (p. 137). The authors note that students with different backgrounds and types of learning issues might meet more success with asynchronous rather than synchronous or vice versa (Mick & Middlebrook, 2015).

UB, the interview participant with the reading/writing disability, found synchronous assistance to be more helpful than asynchronous draft reviews. She had received ten OWC draft reviews, participated in 11 OWC Skype sessions, and engaged in nine CS chat sessions at the time of this study, perhaps because she learned of the CS's existence only after using the OWC so many times. Her struggle was so evident in her reasoning for choosing synchronous help:

> Sometimes because of the time factors for submitting your papers, I really do not have time to learn all the techniques. However, when I show the techniques it is still difficult for me to remember because the rules, are always changing in writing. A cognitive disability means the person have a hard time comprehending or remembering a lot of information. Since I have a reading disability I have a hard time taking the information from my head and getting on a piece paper. With this in mind usually, my writing tutor would ask questions or have me talk it out, since all the information is usually in my head. But I have a hard time getting what in my head on a piece of paper. (UB, R2i, p. 3)

When I asked about whether she thought her writing was improving, UB wrote,

> I making about the same mistakes, since this is my disability, I do not know if I will ever improve. Each paper is different for me. When I'm writing I think I know the rules, but I really do not know the rules, since the rules applied differently. (UB, R2i, pp. 5-6)

UB will always need the kind of writing help that walks her through every issue and every sentence. She is a good example of why offering both asynchronous and synchronous writing assistance options and perhaps even more than one synchronous option would best meet the wide variety of needs among fully online students.

Asynchronous Before Synchronous

If OWC designers can choose only one option to offer fully online students or cannot launch asynchronous and synchronous options simultaneously, they should launch an asynchronous tutoring option first. Based my study's results, participants for the most part seemed to prefer asynchronous assistance to synchronous. One reason for this preference seems to be the time factor. They can "drop off" their paper and receive help while doing other things, as Patty suggests.

> The [CS] chat was good for the short time I used it, it was just that it was too time consuming for me. Instead of sitting there on chat trying to correct my paper with the tutor, I had other things in class or just in life in general to do because I work a full time job and am active in several ministries in church, along with ministering outside of work and church. So [the CS] draft review was better for me, I could submit then go back later to retrieve and review my results. (Patty, R2i, p. 1)

Whether this was the reason behind every participant's preference for asynchronous tutoring, there was a clear preference. Counting the CS draft review and OWC draft review services as separate "tries," interview participants tried asynchronous services 15 times while they tried synchronous services only eight times. I also had a much more difficult time finding in the list of survey respondents interview participants who had used the synchronous services, particularly Skype. Further, according to Table 17 at the end of Chapter Five, the OWC draft service was the only service for which some participants had no complaints, and the CS draft service was the only service for which no participants had a fully negative experience. Both synchronous services were a mixed bag, due mostly to either technological issues or time constraints. Thus, if a designer cannot offer both asynchronous and synchronous simultaneously, asynchronous tutoring will most likely entice more fully online students to seek writing assistance.

This lack of preference for synchronous online tutoring contradicts OWC design literature such as Kastman-Breuch (2005) that encourages f2f tutoring as the best model on which to base online tutoring. The asynchronous approach to online writing instruction has been often criticized and deemed by some as a deficient modality due to its assumed lack of interactivity. Those critics point to its failure to encourage collaboration in keeping with the social constructivist theories still grounding the majority of practices in onsite centers and

composition courses (Coogan, 1999; Cooper, Bui, and Riker, 2000; Enders, 2001; Harris and Pemberton, 1995; Thomas, DeVoss, and Hara, 1998). Yet the majority of participants in my study who used the asynchronous services felt they had learned and improved their grades and had grown as writers; most were highly satisfied, confirming Hewett's (2015b) assertion that those receiving writing instruction online thrive under different approaches than those in f2f courses.

When considering possible asynchronous tools, OWC designers should not choose email exchanges as their only pedagogical tool. A significant majority of all three goal groups in my survey (short-term, long-term, and both) preferred the full draft review (with one day longer wait time) above all other asynchronous options. But those who valued the short-term goal of a better paper or class grade preferred an "email exchange of questions and replies" over the three remaining options, including a partial draft review and audio/visual feedback. In contrast, those who valued the long-term goal of improved writing skills preferred audio/visual feedback to an email exchange. The short-term group's preference for an email exchange over the remaining options and the long-term group's omission of it reveal a perception of its lack of usefulness for long-term learning. Taken together, both groups' responses reveal their perceptions of which technology might foster long-term learning and which might provide specific answers to help "fix" their papers. This survey result supports findings of Castner's (2000) study on why only 12 email consultations out of 554 in her OWC resulted in dialogue. Castner (2000) noted that a lack of dialogue "promotes the wrong idea about the goal of writing centers and the nature of the writing process itself," portraying writing centers as "fix-it shops for writing, places where writing can be repaired in one session" (p. 120). She concludes that email tutoring should not be used or used only as follow-up or a last resort if dialogue is not occurring (Castner, 2000, p.

127). Using his own email tutoring as a case study, Coogan (1995 & 1999) insists that the right approach to email tutoring over weeks or even months can foster dialogue that builds a relationship between the student and the tutor, but his study was an email exchange that went on for months, which would not be feasible for fully online students.

The data referenced above also reveals online students' have little preference for audio feedback, which contests findings of other studies but may be an area for future research since this study's survey respondents ranked preferences but most likely had not experienced tutoring via this medium. Though they were conducted in context of instructor feedback to students in onsite classrooms, other studies suggest student preference for audio feedback or audio and written feedback combined (Anson, 1997; Moore & Filling, 2012; Sipple, 2007; Sipple & Sommers, 2005; J. Sommers, 2012, 2013). These researchers allege that students feel audio feedback is more motivating, more bonding, and less judgmental than written feedback, but most of these studies were conducted on students in on-campus classes. In any case, my study's data suggests that fully online students feel some sort of system of partial to full draft reviews employing OWI recommended best practices would be the best for improving students writing skills for both the short and long term.

Study Limitations and Possibilities

While the results of this study have added fully online student voices to the body of OWC design literature and OWI scholarship and have generated the above implications, the study does have limitations that may affect the applicability of its results. At the same time, these limitations and results also give rise to possible future studies that may provide more insight into effective writing support for fully online students. In the following section, I acknowledge the context and

survey limitations of my study and make suggestions for future research, including studies that may mitigate those limitations.

Limitations of the Study

One limiting factor of this study is its context. As with much of writing center research, context variables change from institution to institution. Whether a writing center's context is a four-year university or a community college or a business school can certainly influence the results of a study at the given center. In my study, thousands of fully online students are enrolled in eight-week courses across hundreds of degree programs of a four-year liberal arts university. Results might differ for a small online program with students enrolled in four-week or 16-week courses. For instance, students enrolled in a 16-week course might welcome a longer turnaround time in order to receive a detailed asynchronous draft review. A wide variety of OWCs already exist for fully online students, but that fact creates an opportunity for further studies of a similar nature within different research contexts in order to confirm my results or demonstrate that my research context may have affected some of my findings. These are opportunities for what Yin (2009) calls replication studies.

A further limitation relates to my survey. For two of my "ranking" questions, the type of question I chose to use and their lack of restrictions limited the usefulness of the data obtained. When the survey asked students to indicate the importance of convenience, connectedness, and academic progress in their selection of writing assistance, the question did not force students to rank the choices but rather allowed students to rate each priority separately. Thus, almost half of the respondents rated all three priorities as of equal importance. The same problem occurred with the question regarding academic progress goals, which asked students to indicate whether they sought writing assistance to earn a better paper or course grade or to improve their writing skills

permanently. The question allowed them to indicate a level of agreement with the two goal statements, so nearly half the respondents "strongly agreed" that they sought writing assistance for both short-term and long-term reasons. My reasoning for using these questions at the time of design was to avoid forcing a certain response in a way that would have participants quit the survey, as these questions were near the start of the survey. In addition, the kind of question that would have forced numbered rankings in order of preference could not be cross tabulated with any other type of question, at least not within Qualtrics, so I chose to avoid limiting myself in that way. As a result, the data based on those two questions are still useful, but not as useful as they could have been for truly ascertaining all respondents' primary motivations in seeking writing support.

Possibilities for Future Research

Within my study's limitations and results, topics for research on fully online students abound, and Ehmann and Hewett have called for more of this research in their oversight of the CCCC Committee on Online Writing Instruction. As mentioned in Chapter Two, online writing tutoring has been included in the idea of online writing instruction from its inception, and so must continue to contribute to that body of research. Ehmann and Hewett (2015) write,

> Given existing questions about participant experiences and OWI processes, therefore, a primary need is to explore the phenomenon of OWI—with individual cases across various institutions and learning contexts being viewed as opportunities to investigate overall trends and patterns that can lead to a deeper understanding of OWI as a phenomenon in and of itself. (p. 526)

They go on to name specific areas of OWI where more research is needed, including the students:

> Students are primary stakeholders in the OWI endeavor. As such, their firsthand experiences warrant exploration in addition to their reasons for engaging in OWI and their views about its purpose and value in the postsecondary context. A priority of this approach is to seek descriptive responses that are rooted in respondents' actual experiences rather than evaluative responses about what OWI should or should not be. The student experience helps to triangulate what researchers see in the many texts that OWI makes archivally available. (Ehmann & Hewett, 2015, p. 533)

My study heeded this specific call for firsthand student experiences with online writing instruction disseminated through different services and technologies, and its limitations and results provide several possibilities for future research.

Given the abovementioned design limitation of my survey, a good follow-up study would involve using a different type of survey question that forces respondents to rank their academic goals for seeking writing assistance and their priorities while selecting it in order of preference rather than allowing goals and priorities to be rated equally. Doing so would more accurately answer my study's second research question as to the possible reasons why fully online students may perceive certain design features as more helpful than others. We might learn more definitively how differing goals and priorities influence these students' choice of service and subsequent improvement of writing skills (or lack thereof).

Confirming student perceptions would be another good follow-up to my study. In Chapter One and Two, I make a solid case for the importance of researching student perceptions, and my study's results demonstrate their value—yet student perceptions are only a first step. Future studies might corroborate or complicate perception results by analyzing and cross-referencing participants' supporting documentation (emails, tutor reports, tutor-reviewed drafts,

CS chat session transcripts, revised drafts, and grades) to determine how well their perceptions correspond with reality. Though perception *is* essentially students' reality, such a study may provide insight into how some of the participants' negative perceptions may be mitigated if they turn out to be unjustified or how positive perceptions may be used to foster real improvement where only perceived improvement has occurred.

One of my interview participants provided an idea for a practical study. The suggestion from Samuel to allow students to choose a shorter turnaround time for a targeted draft review or a longer wait for a full draft review would make an excellent pilot study for an OWC that only offers one of the two options. Would adding and marketing the other option draw new users? Would current users try the new option? An OWC that already offers full reviews for a longer wait may be able to meet the writing needs of a larger percentage of online students by offering targeted reviews to those who would not otherwise use the OWC due to time constraints. By that same token, an OWC that already offers limited reviews may find that some users would take advantage of detailed reviews if they had the opportunity, thereby increasing the amount of instruction they receive at once with an eye toward permanent improvement in multiple areas of weakness. Increased usage in either of these scenarios followed by surveys and/or interviews may have implications for both OWC theory and practice.

The frequency of usage rates in my survey results may also have interesting implications. Though the OWC-only interview participants "visited" the service more frequently than had the CS-only interview participants, the opposite proved to be true for those same groups of survey participants. The CS had a much higher rate of repeat usage than did the OWC, which gave rise to an idea for a study that focuses solely on the perceptions of "frequent flyers" or those who use these services for nearly every assignment throughout their degree program. Such a study could

ascertain whether participants' writing improved since their usage began, and if so, why they continued to use the service, or if not, then why not? This study (or a separate one) could also compare which types of services tend to create dependency (and how).

Other ideas for future research emerge from the experiences of Tanya, the English language learner participant, and UB, the participant with a reading/writing disability. Tanya found the synchronous services too difficult to navigate while UB did not feel the draft reviews helped her revise her papers well enough to pass them. Studies on these two student populations, their perceptions of what design features are helpful and why, might provide tremendous insight into how best to serve these smaller populations of online learners with unique writing needs. Another field of study UB's case brings to mind is that of adult literacy which has seldom been connected to OWC research. Brizee & Wells (2016) describe "the process, research, relationships, and theories that guided a three-year partnership" in which they "worked closely with their community partners to develop, test, revise, and launch" (on their OWL website) adult literacy resources in "GED preparation, English as a Second Language, and workplace and job search literacy" (Abstract). However, that book focuses more on the promotion of civic engagement through collaboration than it does on tutoring in adult literacy education. Based on the results of Oslund's 2011 dissertation *Preparing writing centers and tutors for literacy mediation for working class campus-staff,* she recommends "a framework for planning writing center sessions that facilitate the acquisition of literacy practices which are new to the user" (Abstract). While Oslund's study more directly addresses tutoring in adult literacy, its focus is not on fully online students nor on OWCs. Since fully online students most often are adult learners, studies focused on how OWCs might assist in developing the literacy skills of this population would address a significant gap in the literature.

Other researchers at other institutions or commercial writing tutoring services could conduct any of these studies and many others. A form of my study could be replicated by those who offer at least one synchronous and asynchronous service for their fully online students—especially sites that use tutoring technologies different than those in my study. As Ehmann and Hewett (2015) note, replicating studies across varying contexts with various populations of online students will lead to a deeper understanding of the OWI phenomenon and its trends and patterns, adding to the body of knowledge in the field and helping to perfect its theories and practices.

Reflections

Conducting this study changed me profoundly as both a researcher and an OWC director. In fact, given all that I have learned about conducting research, I do not know that I could call myself a true researcher before undertaking this project, but I certainly feel much closer to being one now. I can say with confidence that I was a decent OWC director before starting this journey, but I am a much better one now than I was before.

Researcher Reflections

More than once during this whole process, especially when I would complete a chapter or a particularly strenuous revision of a chapter, I often thought of the whole process as a metaphorical gestation and delivery—with very real though mostly mental pain involved. This description may sound as though I am being dramatic or exaggerating for effect, but I am not. Until this project, the sort of research I had written involved literary analysis or typical explanatory or argumentative essays one writes in MLA style as an English literature major. APA style and qualitative analysis were part of a mysterious science I was forced to learn and did not enjoy at all. And quantitative analysis? I still use my calculator for subtraction of two-

digit numbers. I had to erase years of being taught and of teaching others never to write "In this paper/chapter/section, I will . . ." The only chapters in my study I did not struggle with were Chapters Five and Six. I deeply enjoyed writing the experiences of my 13 participants in a way that showcased their voices and their desire to better themselves as writers as best they could. I enjoyed culling through their experiences to form a holistic picture of each of the four services. But the other chapters and their components took me weeks, sometimes months to figure out, and I honestly did not fully understand how to align my first three chapters correctly until I had completed the three results chapters. As painful as the whole process was, I loved the moments when another piece of the puzzle clicked into place.

I had originally planned a dissertation much larger in scope. My committee kindly tried to warn me that what I wanted to accomplish could not be done in the time I had left, given all my institutional work in addition to my research. I insisted I could do it, so they wisely let me discover for myself that I could not. I had originally planned to analyze and cross-reference all the supporting documentation of the 13 participants' tutoring sessions, both synchronous and asynchronous with their perceptions of those sessions. However, not only did I not have time to do so, but once I read through their responses, I also realized I wanted the study to be about their perceptions of their experiences—*their* reality, not mine. There would be time enough later if I wished to fact-check their stories. Thus, my methodology shifted to focus solely on my survey respondents and 13 cases—to making what the students perceived as their experiences the central piece of this project.

A final way this study changed me as a researcher and as a writer in general was helping me find enjoyment in sharing my writing processes and research struggles with members of my dissertation group. At first I did not want to join the three other women, friends from my doctoral

program cohort. I had always been a loner when it came to writing academically. I had always thought I did my best work without the distraction of hearing about others' work. But when they invited me to join them a second time, I was coming off a year-long illness and needing motivation to dive back into the work, so I took them up on it. I have never regretted that decision and, in fact, most likely would not have finished. I now understand how important it is to have the ear and support of colleagues going through the same process ahead or alongside of me and how they contributed to my understanding of this thing called qualitative research. Yes, writing and research should be collaborative in a way, even if conducted by three different women on three different topics in three locations across the globe. Now I will never research entirely alone again.

OWC Director Reflections

When I first began my doctoral coursework in the summer of 2010, I had been an OWC director for less than two years. I had one full-time tutor supervisor and 11 tutor positions under my administration, and I had just hired another part-time supervisor in light of our center's ever-increasing usage rate. Now I have three full-time tutor supervisors, 33 tutor positions, and one full-time email and social media coordinator working for me. My duties and the center have grown tremendously, tripling the numbers of applicant interviews and tutor training sessions I conducted at the start of my candidacy. But it is this research project in particular that has made me even more aware of the needs of the community I serve and what more I should have been doing to meet those needs. In those intervening years, I advertised the OWC in as many venues as possible, developed a Live Chat feature where students could click a button and asked a quick grammar or citation question, and created an app (or widget as we call them here) for the students' customized gateway page to the university website. We added a Facebook account and

Twitter feed. And all of this occurred as I went to more conferences and read more books and articles in the areas of online writing instruction and OWC design literature while writing the first three chapters of this project.

Further, now that I have collected my data and analyzed it during this past year, I plan to make more changes to the OWC I direct in keeping with my discoveries. First, I plan to do what interview participant Samuel suggested and provide students with the option to choose a shorter turnaround time for a targeted review of one or two issues or a full paper review in the turnaround time we currently offer. Second, I plan to re-evaluate how the Skype appointments work and try to make them more accommodating to student's schedules. I also plan to adopt better synchronous technology that would provide students with an option to speak or chat and screen share without video and one that includes the ability to record each kind of session. Finally, I plan to launch another "encouragement campaign" where tutors aim to be as encouraging and supportive as possible. We tried that several years before, but it seemed to backfire when online instructors began to complain that this or that tutor had told one of their students she had done something well when she most certainly had not! I will still suggest that tutors find ways to be encouraging, but with caution, so that they do not end up contradicting instructors' opinions. Now that I have seen how such encouragement affected these 13 participants, I understand the need to be strategic in training tutors how to strive for a sense of connection via accurate compliments and supportive but general encouragement.

Final Thoughts

I started out the "Designing the OWC" section of Chapter One by sharing my "know your audience" philosophy as part of the impetus for this research project. I thought I already knew my audience, and I did in some respects, but not as well as I thought. I thought that they

would prefer having tutors familiar with their online program and its teachers and values, but they did not. I thought that the OWC would at least equal the CS in rating of its use of good OWI practices, but it came out slightly lower. As a good technology steward should, I finally started getting to know my audience as thoroughly as I needed to. Wenger et al. (2009) warn technology stewards that "achieving such understanding [of the community and its subgroups] will require a combination of direct involvement, observations and conversations with community members" (p. 26). I hope OWC designers, researchers, and directors who read this dissertation will see it as the challenge I did, a challenge to learn to know the communities for which we provide assistance so we can choose the best technology and best pedagogical strategies that fit those technologies. I hope they see this as a challenge to include all types of learners' voices in the literature, not just those who have a presence in on-campus classrooms.

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Appendix A

Academic Writing Assistance Survey: Informed Consent

As an online student, you are invited to participate in a survey about online writing assistance. Your opinion is important, whether you have used [the university]'s Online Writing Center, [the CS], neither, or both. The survey takes about 15 minutes to complete. At the conclusion, you will be offered the opportunity to participate further (for compensation).

Participation in this study is voluntary. If you begin, you can stop at any time. There are no foreseeable risks or discomforts for taking part in this survey. The results of the survey may help us improve university online writing support.

Information you provide will be kept confidential. It will be stored and referenced using only pseudonyms. If you have any questions or concerns about this research, please contact either the principle investigator or the principle investigator's advisor. Contact information is below.

Principle Investigator:
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By completing the survey, you acknowledge you have read the statement of informed consent above and agree to participate in this study as heretofore described.

THIS PROJECT HAS BEEN APPROVED BY THE INDIANA UNIVERSITY OF PENNSYLVANIA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS (PHONE 724.357.7730).

Appendix B

Academic Writing Assistance Survey

This survey captured other student data on the front end (name, student ID number, degree program, classification, gender, current age, first language, and frequency and recentness of service use). Below are the questions that pertain specifically to the study's research questions. These questions are currently in the form they will be asked, but in the final version of this dissertation, all references to [the CS] will be changed to "the commercial service."

Students Who Have Never Used Either Service

ALLG1. Which of these statements describes you?

1. I have used the Online Writing Center's (OWC's) tutoring services.
2. I have used [the CS]'s writing tutoring services before
3. I have used both the writing tutoring services of [the CS] and the OWC.
4. I have never used either tutoring service for writing assistance.
5. None of the above.

NUSE1. Why haven't you used either service? Check all that apply.

1. I was not aware they existed
2. I do not need writing assistance
3. I didn't have time to seek assistance
4. The process seemed too difficult
5. I dislike sharing my writing
6. Other (explain in text box below)

ALLG2. Rate your agreement with the following statements regarding reasons you may seek writing assistance (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, Not Applicable).

a. The main reason I may seek writing assistance is to help me improve my writing skills permanently
b. The main reason I may seek writing assistance is to help me get a higher grade on my paper and in the class

ALLG3. Rate how important each of these aspects are for choosing writing assistance. (Extremely Important, Very Important, Moderately Important, Slightly Important, Not at all Important):

1. Connectedness (collaboration, sense of belonging, relationship)
2. Academic improvement
3. Convenience (ease of use and fit with schedule)

ALLG 4. Rank the following synchronous (real-time) options in order of most preferred (a) to least preferred (e) way of receiving writing assistance. Drag and drop to rank options.

a. Chat box with shared screen controlled by tutor
b. Chat box with shared screen controlled by you
c. Video conference with shared screen controlled by tutor
d. Video conference with shared screen controlled by you
e. Audio call only (phone or Skype, for instance)
f. Audio call with shared screen controlled by you
g. Audio call with shared screen controlled by tutor

ALLG 5. Rank the following asynchronous (non-real-time) options in order of most preferred (a) to least preferred (e) way of receiving writing assistance

a. Full review of your draft (front comment, summary comment, and comments throughout) with 1 day longer wait time
b. Partial review of your draft (front comment and comments down part of your paper) with 1 day shorter wait time
c. Audio feedback on draft (mp3 or wav file)
d. Audio/visual feedback (i.e. screen capture of your draft with recorded feedback)
e. Email exchange of questions and replies

ALLG 6. Rank the following tutor preferences in order of most important (a) to least important (e).

a. A tutor I chose myself from all available tutors
b. A tutor who has earned degree in English or writing
c. A tutor who shares the same values as I do
d. An excellent writer from outside of my institution
e. An excellent writer ahead of me in the same or a similar degree program at my institution

Students Who Have Only Used the Institutional OWC

ALLG1. Which of these statements describes you?

1. I have used the Online Writing Center's (OWC's) tutoring services.
2. I have used [the CS]'s writing tutoring services before
3. I have used the writing tutoring services of both [the CS] and the OWC.
4. I have never used either tutoring service for writing assistance.
5. None of the above.

OWCG1. Why haven't you tried [the CS] for writing help? (Check all that apply)

1. I wasn't aware [the university] partnered with [the CS]
2. The process for using [the CS] seemed too difficult
3. [the CS] seemed less helpful for permanently improving my writing skills
4. [the CS] seemed less helpful for fixing my paper
5. [the CS] seemed less collaborative
6. [the CS] seemed less connected to the university
7. [the CS] seemed less convenient
8. Other (include text box)

ALLG2. Rate your agreement with the following statements regarding reasons you may seek writing assistance (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, Not Applicable).

a. The main reason I may seek writing assistance is to help me improve my writing skills permanently
b. The main reason I may seek writing assistance is to help me get a higher grade on my paper and in the class

ALLG3. Rate how important each of these aspects are for choosing writing assistance. (Extremely Important, Very Important, Moderately Important, Slightly Important, Not at all Important):

1. Connectedness (collaboration, sense of belonging, relationship),
2. Academic Improvement
3. Convenience (ease of use and fit with schedule)

ALLG 4. Rank the following synchronous (real-time) options in order of your most preferred (a) to least preferred (e) way of receiving writing assistance

a. Chat box with shared screen controlled by tutor
b. Chat box with shared screen controlled by you
c. Video conference with shared screen controlled by tutor
d. Video conference with shared screen controlled by you
e. Audio call only (phone or Skype, for instance)
f. Audio call with shared screen controlled by you
g. Audio call with shared screen controlled by tutor

ALLG5. Rank the following asynchronous (non-real-time) options in order of your most preferred (a) to least preferred (e) way of receiving writing assistance

a. Full review of your draft (front comment, summary comment, and comments throughout) with 1 day longer wait time
b. Partial review of your draft (front comment and comments down part of your paper) with 1 day shorter wait time
c. Audio feedback on draft (mp3 or wav file)
d. Audio/visual feedback (i.e. screen capture of your draft with recorded feedback)
e. Email exchange of questions and replies

ALLG 6. Rank the following tutor preferences in order of most important (a) to least important (e).

a. A tutor I chose myself from all available tutors
b. A tutor who has earned degree in English or writing
c. A tutor who shares the same values as I do
d. An excellent writer from outside of my institution
e. An excellent writer ahead of me in the same or a similar degree program at my institution

OWC Only—Synchronous Users

OWCG2. Which of these statements describes you?

1. I have used the Online Writing Center's Live Appointment service via Skype.
2. I have used the Online Writing Center's draft review service.
3. I have used both the Online Writing Center's Live Appointment service and draft review service.
4. None of the above.

ALLG7. How long ago did you use the Online Writing Center's Live Appointment service via Skype?

a. in the last 1-2 weeks
b. in the last 3-4 weeks
c. over 4 weeks ago

ALLG8. How many times have you used the Online Writing Center's Live Appointment service via Skype?

a. only once
b. 2-5 times
c. 6-10 times
d. 11 or more times

OWCS1. Rate your agreement with the following statements regarding your experience with the OWC's Skype appointments. (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, N/A)

- My tutor accurately interpreted my writing needs
- My tutor clearly communicated helpful explanations, examples, and resources.
- I felt like I collaborated with my tutor on my paper
- I felt a sense of personal connection with my tutor
- My tutor stayed focused on my expressed writing needs
- My tutor's comments/questions encouraged critical thinking about my topic
- I made notes on or changes to my work during the session
- My tutor made notes or changes to my work during the session
- My tutor offered clear guidance about potential next steps I should take to improve my writing
- I returned to the transcript or summary of the session to help me make revisions
- I adjusted easily to the technology
- More time was spent on discussing my writing needs than on learning to use the technology
- This experience contributed to my growth as an academic writer
- This experience hindered my growth as an academic writer

OWCC1. Rate your agreement with the following statements regarding your experience with the OWC's Skype appointments. (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, N/A)

- This option of this service was easily accessible

- This option of this service fit well with my schedule and lifestyle
- This option of this service was easy to use because I have used similar technology before
- This option of this service was easy to use because it is user friendly
- This option of this service was easy to use because all the guidelines were clear

OWC Only—Asynchronous Users

OWCG2. Which of these statements describes you?

1. I have used the Online Writing Center's Live Appointment service via Skype.
2. I have used the Online Writing Center's draft review service.
3. I have used both the Online Writing Center's Live Appointment service and draft review service.
4. None of the above.

ALLG7. How long ago did you use the Online Writing Center's draft review service?

a. in the last 1-2 weeks
b. in the last 3-4 weeks
c. over 4 weeks ago

ALLG8. How many times have you used the Online Writing Center's draft review service?

a. only once
b. 2-5 times
c. 6-10 times
d. 11 or more times

OWCS1. Rate your agreement with the following statements regarding your experience with the OWC's draft review service. (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, N/A)

- I could easily communicate my writing needs to my tutor
- My tutor clearly communicated helpful explanations, suggestions, and resources.
- I felt like I collaborated with my tutor on my paper
- I felt a sense of connection with my tutor
- My tutor offered clear guidance about potential next steps I should take to improve my writing
- My tutor summarized my writing strengths and weaknesses
- My tutor offered guidance on my development of ideas and the flow of my paper
- My tutor's comments encouraged critical thinking about my topic
- My tutor's comments were easy to understand
- My tutor identified my grammatical and stylistic patterns of error
- My tutor provided examples of needed corrections and revisions
- This experience contributed to my growth as an academic writer
- This experience hindered my growth as an academic writer

OWCC1. Rate your agreement with the following statements regarding your experience with the

OWC's draft review service. (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, N/A)

- This option of this service was easily accessible
- This option of this service fit well with my schedule and lifestyle
- This option of this service was easy to use because I have used similar technology before
- This option of this service was easy to use because it is user friendly
- This option of this service was easy to use because all the guidelines were clear

Students who have experienced both the asynchronous and synchronous options of the OWC will answer both strands of questions.

Students Who Have Used Only the Commercial Service

ALLG1. Which of these statements describes you?

1. I have used the Online Writing Center's (OWC's) tutoring services.
2. I have used [the CS]'s writing tutoring services before
3. I have used the writing tutoring services of both [the CS] and the OWC.
4. I have never used either tutoring service for writing assistance.
5. None of the above.

TUTG1. Why haven't you tried the Online Writing Center? (Check all that apply)

1. I wasn't aware [the university] had an online writing center
2. The process for using the OWC seemed too difficult
3. The OWC seemed less helpful for permanently improving my writing skills
4. The OWC seemed less helpful for fixing my paper
5. The OWC seemed less collaborative
6. The OWC seemed less connected to the university
7. The OWC seemed less convenient
8. Other (include text box)

ALLG2. Rate your agreement with the following statements regarding reasons you may seek writing assistance (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, Not Applicable).

a. The main reason I may seek writing assistance is to help me improve my writing skills permanently
b. The main reason I may seek writing assistance is to help me get a higher grade on my paper and in the class

ALLG3. Rate how important each of these aspects are for choosing writing assistance. (Extremely Important, Very Important, Moderately Important, Slightly Important, Not at all Important):

1. Connectedness (collaboration, sense of belonging, relationship),

2. Academic Improvement
3. Convenience (ease of use and fit with schedule)

ALLG 4. Rank the following synchronous (real-time) options in order of your most preferred (a) to least preferred (g) way of receiving writing assistance

a. Chat box with shared screen controlled by tutor
b. Chat box with shared screen controlled by you
c. Video conference with shared screen controlled by tutor
d. Video conference with shared screen controlled by you
e. Audio call only (phone or Skype, for instance)
f. Audio call with shared screen controlled by you
g. Audio call with shared screen controlled by tutor

ALLG5. Rank the following asynchronous (non-real-time) options in order of your most preferred (a) to least preferred (e) way of receiving writing assistance

a. Full review of your draft (front comment, summary comment, and comments throughout) with 1 day longer wait time
b. Partial review of your draft (front comment and comments down part of your paper) with 1 day shorter wait time
c. Audio feedback on draft (mp3 or wav file)
d. Audio/visual feedback (i.e. screen capture of your draft with recorded feedback)
e. Email exchange of questions and replies

ALLG 6. Rank the following tutor preferences in order of most important (a) to least important (e).

a. A tutor I chose myself from all available tutors
b. A tutor who has earned degree in English or writing
c. A tutor who shares the same values as I do
d. An excellent writer from outside of my institution
e. An excellent writer ahead of me in the same or a similar degree program at my institution

Commercial Service Only—Synchronous Users

TUTG2. Which of these statements describes you?

1. I have used [the CS]'s live chat w/whiteboard service for writing assistance.
2. I have used [the CS]'s draft review service.
3. I have used both [the CS]'s live chat w/whiteboard service and draft review service.
4. None of the above.

ALLG7. How long ago did you use [the CS]’s live chat with whiteboard service?

a. in the last 1-2 weeks
b. in the last 3-4 weeks
c. over 4 weeks ago

ALLG8. How many times have you used [the CS]’s live chat with whiteboard service?

a. only once
b. 2-5 times
c. 6-10 times
d. 11 or more times

TUTS1. Rate your agreement with the following statements regarding your experience with the [CS]'s live chat with whiteboard service. (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, N/A)

- My tutor accurately interpreted my writing needs
- My tutor clearly communicated helpful explanations, examples, and resources.
- I felt like I collaborated with my tutor on my paper
- I felt a sense of personal connection with my tutor
- My tutor stayed focused on my expressed writing needs
- My tutor's comments/questions encouraged critical thinking about my topic
- I made notes on or changes to my work during the session
- My tutor made notes or changes to my work during the session
- My tutor offered clear guidance about potential next steps I should take to improve my writing
- I returned to the transcript or summary of the session to help me make revisions
- I adjusted easily to the technology
- More time was spent on discussing my writing needs than on learning to use the technology
- This experience contributed to my growth as an academic writer
- This experience hindered my growth as an academic writer

TUTC1. Rate your agreement with the following statements regarding your experience with the [CS]'s live chat with whiteboard service. (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, N/A)

- This option of this service was easily accessible
- This option of this service fit well with my schedule and lifestyle
- This option of this service was easy to use because I have used similar technology before
- This option of this service was easy to use because it is user friendly
- This option of this service was easy to use because all the guidelines were clear

Commercial Service Only—Asynchronous Users

TUTG2. Which of these statements describes you?

1. I have used [the CS]'s live chat w/whiteboard service for writing assistance.
2. I have used [the CS]'s draft review service.
3. I have used both [the CS]'s live chat w/whiteboard service and draft review service.
4. None of the above.

ALLG7. How long ago did you use the [CS]'s draft review service?

e. in the last 1-2 weeks

f. in the last 3-4 weeks
g. over 4 weeks ago

ALLG8. How many times have you used the [CS]'s draft review service?

a. only once
b. 2-5 times
c. 6-10 times
d. 11 or more times

TUTS1. Rate your agreement with the following statements regarding your experience with the [CS]'s draft review service. (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, N/A)

- I could easily communicate my writing needs to my tutor
- My tutor clearly communicated helpful explanations, suggestions, and resources.
- I felt like I collaborated with my tutor on my paper
- I felt a sense of connection with my tutor
- My tutor offered clear guidance about potential next steps I should take to improve my writing
- My tutor summarized my writing strengths and weaknesses
- My tutor offered guidance on my development of ideas and the flow of my paper
- My tutor's comments encouraged critical thinking about my topic
- My tutor's comments were easy to understand
- My tutor identified my grammatical and stylistic patterns of error
- My tutor provided examples of needed corrections and revisions
- This experience contributed to my growth as an academic writer
- This experience hindered my growth as an academic writer

TUTC1. Rate your agreement with the following statements regarding your experience with the [CS]'s draft review service. (Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, N/A)

- This option of this service was easily accessible
- This option of this service fit well with my schedule and lifestyle
- This option of this service was easy to use because I have used similar technology before
- This option of this service was easy to use because it is user friendly
- This option of this service was easy to use because all the guidelines were clear

ALLG9. Share below any thoughts you may have about [the university]'s writing support services.

TEXTBOX HERE

ALLG10. A small number of participants are needed for follow-up email interviews. Indicate your willingness below and, **if contacted**, earn $50 by completing these steps:

1. Select "Yes" below and provide your email address.
2. Look for an email entitled "Writing Assistance Interview".
3. Answer in detail two sets of 10 emailed questions about your tutoring experiences.
4. Receive a $50 Visa Gift Card and thank you in the mail.

If you do not receive an email within the next 30 days, then no further participants were needed.

Would you be willing to be contacted for a follow-up email interview?

- Yes
- No

What's your preferred email?

Students who have experienced both the asynchronous and synchronous options of the commercial service will answer both strands of questions.

Students who have used both services will follow both service's tracks and answer questions about as many of the synchronous/asynchronous options as they have used.

Appendix C

Email Interview Participant's Informed Consent Email

Dear [University] Online student,

Recently, you completed [the university]'s Academic Writing Assistance Survey and agreed to follow-up contact. You have been selected to participate in an email interview that is part of the same research project exploring online students' perceptions of and preferences for various features of online writing assistance.

Participation in this study is voluntary. There are no foreseeable risks or discomforts for taking part in this interview. Should you choose to answer in detail two sets of 5-10 emailed questions within 72 hours of receiving them, you will receive a $50 Visa gift card mailed to you as compensation.

Participation in this study indicates consent to allow a review of university and or/commercial documentation (tutoring request forms, session transcripts, tutor-reviewed drafts, and OWC emails) relevant to the online tutoring experiences described in your interview responses.

Information you provide in your interview responses will be kept confidential. It will be stored and referenced using only pseudonyms. Your name will be also be kept anonymous and all documentation and data will be inaccessible to anyone other than the principle investigator.

If you have any questions or concerns about this research, please contact either the principle investigator or the principle investigator's advisor. Contact information is below.

Principle Investigator:
Shelah Y. Simpson
Assistant Professor of English
[Anonymous] University
University Blvd.
City, State Zip Code
Work Number
Work Email Address

Investigator's Advisor:
Dr. Ben Rafoth, Distinguished Professor
Writing Center, 218 Eicher Hall
860 Grant Street
Indiana University of Pennsylvania
Indiana, PA 15705-1015
724-357-3029
brafoth@iup.edu

By replying to this email in the affirmative, you acknowledge you have read the statement of informed consent above and agree to participate in this study as heretofore described. Once the investigator receives your reply, she will email you the first set of questions within 48 hours.

THIS PROJECT HAS BEEN APPROVED BY THE INDIANA UNIVERSITY OF PENNSYLVANIA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS (PHONE 724.357.7730).

Appendix D

Email Interview Protocol: Initial Interview

Dear [University] Online student,

Thank you for consenting to participate in this study of online student perceptions of online writing assistance options. The goal of this study is to add the perspectives of fully-online students to the writer center and writing instruction fields of study.

Given this goal, I value your opinions of these writing services and how the features of each have either furthered or hindered your growth as an academic writer. As you respond to each question, please convey all perceptions and feelings about your tutoring experience(s) using thorough description—and even emojis if you wish.

Please answer each question separately for ALL services you have tried. For instance, if you have used both the OWC's Skype service and draft review service, write two responses to each question, one clearly labeled for each of those services, since the point of the study is to compare student experiences with the various services. If you have had multiple experiences with multiple services, do your best to describe the things that stand out to you about your experience with each type of service (draft review, Skype, etc.).

The information you provide will be protected and stored under a pseudonym (of your choice, if you wish). If you complete and return your answers within 72 hours, and then complete and return one set of follow-up questions within 72 hours, I will mail you a $50 Visa gift card in appreciation of your time, honesty, thoroughness, and promptness. Thank you for your willingness to participate!

**NOTE: The questions in parentheses following each main question are simply meant to jog your memory or further elaborate on the main question; please do not feel like you must answer each one.

PRE-SESSION EXPERIENCE

1. How did you find out about the tutoring service? What made you decide to try it?

2. What results did you hope to achieve by using the tutoring service? (What were your specific writing needs before you used the service and how did you hope they would be resolved?)

3. Describe your *initial* level of comfort with this service. (How inviting was its website? How well did its timeliness fit your schedule? How easy was it to access and use?)

SESSION EXPERIENCE

4. Describe your experience with the technology. (Was its functionality already familiar to you or easy to learn? How well did it function? Did it allow smooth communication between you and your tutor?)

5. Describe the writing assistance you requested. (What questions did you ask or writing needs did you express to your tutor throughout the session?)

6. Describe the writing assistance you received. (What writing needs did your tutor address? With what kind of guidance did the tutor use to address them? In what way(s) did your tutor use the technology to help you?)

7. Describe the interaction with your tutor during the live session—or quality of communication between you and your tutor for your draft review. (What sense of connection to your tutor did you feel and why? Do you feel you and your tutor collaborated to make the paper better? Did you take notes and make changes to your paper? Did your tutor make changes to your paper?)

POST-SESSION EXPERIENCE

8. Describe your revision process based on the writing assistance you received, sharing specific aspects of your paper(s) you did and did not choose to revise. (What tutor advice did you choose to follow or ignore and why? Did you review the transcript, summary, or recording of your session or your own session notes as you made changes?)

9. How satisfied are you with your final draft(s) and the writing assistance you received? Why?

10. How satisfied are you with your overall tutoring experience? Why? (Consider which of these aspects are most important to you as you answer: convenience, ease of access, ease of use, sense of connection/collaboration, smooth communication of writing needs, the tutor's knowledge or university experience, the quality of writing assistance, etc.)

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Appendix E

Email Interview Protocol: Follow-up Interview

(This is only the accompanying email; follow-up questions were developed based on initial interview responses and sent only for clarification of those responses if needed)

Dear [University] Online student,

As you may recall, this study seeks your honest opinions about the features of these writing services and how each aspect of them has either advanced or hindered your growth as an academic writer.

To ensure I represent your voice as accurately as possible, it is important that I "listen" well to your email responses and correctly interpret your described experiences. Thus, your answers to the follow-up questions below will help further clarify a few of your initial responses and your survey responses so your true voice (under its pseudonym) and the experiences you had may be accurately portrayed.

I have included your initial interview responses below for your reference. My follow-up questions are in red, both among your initial responses and below them. Please respond to all questions in red with an additional few sentences.

If you completed and returned your initial email answers within 72 hours and you complete and return this set of follow-up questions within 72 hours, I will mail you a $50 Visa gift card in appreciation of your time, honesty, thoroughness, and promptness. Thank you for your willingness to participate!

THIS PROJECT HAS BEEN APPROVED BY THE INDIANA UNIVERSITY OF PENNSYLVANIA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS (PHONE 724.357.7730).

Appendix F

Sample of Researcher Generated Documents

(Analysis of “Other” responses to non-usage survey questions).

Non-Usage of the CS

Reason / Perception	**Count**	**Survey Numbers**
Lack of time / Doesn't fit my schedule	6	37, 188, 242, 253, 352, 446, 465
Process seems too difficult	2	23, 483
The OWC meets my needs	10	28, 47, 89, 96, 268, 286, 301, 377, 415, 435
Don't need the help	7	11, 130, 187, 227, 381, 505, 546
I thought I'd have to pay	1	300
Never thought about it	2	186, 174, 207
Did not know about the CS	1	35

Non-Usage of the OWC

Reason / Perception	**Count**	**Survey Numbers**
Lack of time	5	86, 185, 232, 386, 541
Process seems too difficult	3	217, 379, 413
I get help elsewhere (family, friend, instructor, resources, purchased editing program)	3	238, 338, 361
Don't need the help	1	256
[the CS] meets my needs	2	276, 471
Not available late at night / immediate [the CS] availability	3	263, 341, 448

Non-Usage of Either Service

Reason / Perception	Count	Survey Numbers
Lack of time	12	30, 124, 148, 155, 170, 224, 304, 378, 392, 417, 428, 605
Process seems too difficult	7	94, 189, 272, 302, 370, 397, 503
I get help elsewhere (family, friend, instructor, resources, purchased editing program)	10	91, 173, 240, 258, 311, 335, 358, 455, 474, 567
Don't need the help	16	3, 55, 73, 98, 183, 239, 245, 283, 337, 343, 356, 376, 382, 394, 398, 499
Anxiety / Depression / Fear of sharing	5	1, 18, 126, 277, 325, 455
Wanted to brainstorm instead of upload draft	1	52
Did not know about them	2	496, 550

Appendix G

Sample Profile Chart

This chart is empty to protect confidential data and color-coded according to demographics, pre-session, session, and post-session. Profile charts used the descriptive framework of the above interview questions (Appendix D).

Profile of Real Name (Pseudonym)

Age:

Gender:

Degree program:

Classification:

Distinguishing characteristics:

How heard about service:

Writing needs & priorities:

Number of uses of service:

Perceptions of usability:

Perceptions of feedback helpfulness:

Perceptions of collaboration:

Practices post-session:

Perceptions of own improvement:

Perceptions of other service if offered:

Appendix H

Cross-Case Preliminary Word Table

This table is empty to protect confidential data, arranged as it appears in my case study database before analysis for repetition of ideas by more than one participant.

Cross-Case Word Table (one for each of four services)

I. Convenience
- A. Ease of access (finding service)
- B. Ease of use
- C. Timeliness

II. Connectedness (any comments about collaboration or sense of belonging)

III. Academic Improvement
- A. Perceptions of what occurs during session
- B. OWI best practices noted

IV. Ways in which participants perceived service as hindrance or help