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Questioning Assumptions About Online Tutoring: A Mixed-Method Study of Face-to-Face and Synchronous Online Writing Center Tutorials

Abstract

As online writing tutorials become increasingly widespread, writing center scholars continue to debate the pedagogical differences between face-to-face and online tutoring (Breuch, 2005; Denton, 2017; Neaderhiser & Wolfe, 2009). However, empirical research has lagged behind technological advancement, with only one study (Wolfe & Griffin, 2012) comparing face-to-face and media-rich online writing center tutorials. This article builds on such scholarship by sharing results from a comparative study of face-to-face and synchronous audio-video online tutorials that collected data from writing tutorials, writers' postsession surveys, and interviews with writers. Using primarily linguistic analysis of the hundreds of interactions in each of the 24 transcribed writing tutorials, we determined that audio-video online and face-to-face sessions share similarities in tutoring strategies, discourse phases, tutor-writer interaction, and student satisfaction. However, significant differences were found in the



conversation content of online and face-to-face tutorials, including evidence that online sessions were more likely to focus on microlevel concerns (such as grammar, syntax, and vocabulary) and that writers' perceptions of the tutorial mode shaped their goals and led to such differences. Ultimately, this study challenges enduring assumptions about online sessions and calls on writing center scholars to be more attentive to the pedagogical affordances and constraints of online tutoring.

While writing center scholars have increasingly turned away from debating questions of whether online tutorial sessions work to investigating how they function and for whom, the COVID-19 pandemic has demanded that all writing center practitioners evaluate the viability of online tutoring to safeguard the well-being of our students and staff. Early online writing centers were characterized by asynchronous, email-based tutoring and text-based chat, and the scholarship during this period from the mid-1980s to the early 2010s revolved around questions of efficacy and rapport building. Although such asynchronous services once dominated online writing tutorials, with 91% of the institutions who reported online services in the 2006 Writing Centers Research Project (WCRP) survey using email to conduct tutorials (Neaderhiser & Wolfe, 2009, p. 61), synchronous and media-rich services gained ground in the 2010s. Of the 132 institutions indicating they had online services in the 2016–17 WCRP (Purdue Online Writing Lab, 2020), 55% reported offering asynchronous online tutoring, 39% reported using text-based real-time tutoring, and 33% reported using voice-based synchronous tutoring.¹ Data from the National Census on Writing confirms these trends. In the 2013 census, approximately 214 writing centers at four-year institutions reported offering online consultations. The 2017 census captures the proliferation of modes, with 232 four-year institutions reporting online appointments, 166 online tutoring via email, and 60 tutoring via phone.

As technology has begun to afford more opportunities for real-time and voice-based tutoring, the establishment of organizations like the Online Writing Center Community (http://onlinewritingcenters.org/) has signified that online tutoring has arrived as a staple writing center service (Prince, Willard, Zamarripa, & Sharkey-Smith, 2018). During this period, research such as that conducted by Joanna Wolfe and Jo Ann Griffin (2012) and the present study have posed questions about how writing center pedagogy varies by the

¹ These percentages are approximations; not all institutions who reported online tutorial services in 2016–17 responded to the open-ended questions about tutoring modes. The raw data for past years is available here, https://owl.purdue.edu/research/writing_centers_ research_project_survey.html.

conferencing environment. However, empirical studies of online tutoring technologies have not kept pace with their proliferation during the COVID-19 pandemic or with writing center practitioners' desire to know more about the ramifications of adopting these technologies.

Our writing center at the University of Illinois at Urbana–Champaign decided to implement online tutorials in the spring of 2017, having not previously offered online services beyond our website. Like similar centers, we looked at who we were serving—and, as important, who we weren't—and asked ourselves how we could be more accessible to distance students, working students, students with disabilities, and others who might not be able to attend our physical center in person easily. Wanting to preserve the same dialogic educational approach used in our face-to-face tutorials and to maximize our existing resources, we used WCOnline to implement a synchronous tutoring platform that included video, audio, text-based chat, and a whiteboard space.

Rather than working from assumptions about our online sessions, we wanted to understand empirically how writers and consultants experienced synchronous online tutorials in our R1 writing center setting. To our knowledge, only Wolfe & Griffin (2012) had compared face-to-face and media-rich (defined as real-time audio and shared workspace) online writing center tutorials "to see what practices we can directly migrate to new settings, which practices need to be modified or transformed, and what new practices we need to add to our collective pedagogical repertoire" (p. 62). Following in Wolfe & Griffin's footsteps, we wanted to know, how the tutorial setting affects "the pedagogical quality of the conferences or the nature of consultant-writer interactions" (p. 65). More specifically, we asked:

- What conversational tutorial strategies and content comprise the focus of online and face-to-face writing tutorials?
- What writing goals do students bring to online and face-to-face sessions?
- What are the characteristics of tutor-writer interaction in online and face-to-face sessions?
- How satisfied are students with their online and face-to-face sessions, and what contributes to their sense of satisfaction?

This article shares our writing center's experience implementing online tutoring with a comparative, mixed-method, and naturalistic assessment design that provides insight into student and tutor experiences and perceptions of the tutoring that took place in both face-to-face and online settings. In our analyses of 24 recorded writing tutorials, 41 postsession surveys, and six interviews with writers, we found few differences between conference settings in tutoring strategies and tutor-writer interactions. However, the differences in conversational content of our tutorials was statistically significant, with online sessions more than 3 times as likely to address microlevel concerns than face-to-face sessions.

We argue that these differences stem from writers' perceptions of the conference modes. This article concludes with recommendations for preparing tutors to adapt to the online setting by considering a new definition of pedagogical quality and by exceeding, not just meeting, students' writing goals.

Taking Tutorials Online

With the growth of online writing tutorials (OWTs), writing center scholars have debated the philosophical and pedagogical differences between face-to-face and online tutoring. Much of this scholarship has been descriptive and theoretical, aiming to make sense of the landscape shaped by digital technologies first emerging in the late 1980s, and much of it has focused on asynchronous tutoring. Since the advent of digital writing technologies, writing center practitioners have adopted what Stephen Neaderhiser & Wolfe (2009) characterize as a "tension between technological endorsement and technological resistance" (p. 68). Early OWT scholarship was guided by the expectation that online tutorials should follow face-to-face pedagogies but cautioned that the "inherent disadvantages" (Jackson, 2000, p. 2) of online tutorials would result in a loss of the dynamic give-and-take of writing center dialogue and a lack of rapport (Harris, 1998; Jackson, 2000; Raign, 2013; Spooner, 1994), less ability to enact the Burkean-parlor model common to face-to-face sessions (Breuch, 2005), and a greater likelihood of focusing on grammar, spelling, and mechanics as the "product" takes center stage (Breuch, 2005; Buck, 2008; Raign, 2013; Spooner, 1994). Despite these concerns, proponents of OWTs have described technologies that allow writing centers to better reach and engage their constituencies (Coogan, 1998; English, 2000; Harris, 1998; Shewmake & Lambert, 2000; Thurber, 2000), and the growth of online postsecondary education has only increased the need to provide equitable writing support to all of our students (Prince, Willard, Zamarripa, & Sharkey-Smith, 2018).

As writing center practitioners launch or revisit existing online services—as many have done in response to the COVID-19 pandemic—questions such as how a given mode or platform will affect tutorials within a writing center's mission and values are only beginning to be answered by empirical research. For instance, Kathryn Denton (2017) provides evidence that asynchronous conferences address a variety of writing issues and are tailored to individual students' needs, countering some of the concerns raised above. Empirical research examining synchronous OWTs has focused on technologies using text-based chat and a shared workspace. In a comparative study of email and real-time text-based peer conferencing, Lee Honeycutt (2001) found that email produced "more directive comments about potential revision strategies, whereas synchronous conferencing support[ed] informative elicitive comments indicating a greater amount of personal and collaborative involvement with the author" (p. 54). In other words, chats were faster and friendlier, while email allowed peers to formulate more reflective and clear responses. Comparing face-to-face and text-based chat tutorials at a Hong Kong university writing center staffed and used by second-language writers, Rodney Jones, Angel Garralda, David Li, & Graham Lock (2006) found that synchronous text-based interactions were more likely to focus on "higher order goals," such as writing process and content, than on issues of grammar and sentence structure. These tutors were more likely to establish hierarchical, directive relationships in face-to-face sessions, while the online platform supported a "more egalitarian relationship"; however, the authors caution that greater writer control in the online session did not necessarily lead to greater improvements in learning (p. 16). Beth Hewett (2006) further explored approaches to "teach[ing] through text" (p. 6) in her study of 52 synchronous conferences that relied on text-based chat and whiteboard space. Hewett found that in these conferences between professional online instructors and first-year writing students, the majority of students requested help with idea development, revision processes, and brainstorming (p. 11), but about half the tutor talk "was oriented toward guiding and explaining the instructional interaction itself-that is, in developing human-to-human contact and facilitating communication about the interaction and the whiteboard's workspace" (p. 24).

Most similar in design and purpose to the present study, Wolfe & Griffin's (2012) study compared face-to-face tutorials and two synchronous platforms (WordShare and Tablet PC) that incorporated both audio and a shared workspace (but no video component) to determine how the conferencing environment affected "the pedagogical quality of the conferences or the nature of consultant-writer interactions" (p. 65). They collected data from 24 sessions (eight in each mode) conducted with 16 writers and eight tutors. All sessions were conducted in the writing center, and participants were compensated for their time. Wolfe & Griffin assessed differences in conversational control, document marking, and holistic ratings (overall success, engagement, degree of rapport, writer responsibility for learning, and strategies such as fixing the writer's paper and building rapport), and they also collected postsession satisfaction surveys. Overall, they found few significant differences in the holistic ratings among the three settings but noted "consultants were perceived as doing marginally more fixing of writers' papers in the TabletPC condition than in the other two media" (p. 78). Their postsession surveys indicated that while most students either preferred online sessions (56%) or had no preference (31%), the majority of tutors preferred face-to-face sessions (75%), worried about the perceived inefficiency and text-driven focus of online sessions, and "found the absence of body language and facial cues made online communication more difficult" (pp. 81, 82).

Despite the expansion of OWTs and the continuing proliferation of tutorial modes, no major writing center journal has yet published a study comparing synchronous audio-video and face-to-face conferences. While many scholars agree synchronous online tutorials "come closer to replicating what is good about face-to-face tutorials than asynchronous tutorials do" (Grutsch McKinney, 2010, p. 11), others continue to call for more research and to voice hesitation regarding online tutorials.² For instance, Andrea Lunsford & Lisa Ede (2011) sound a note of caution in their IWCA-NCPTW address: "We hope and pray that virtual writing centers will not replace real-life centers entirely: for us, there is something about sitting face to face with a student, talking out ideas, raising key questions, engaging in rich dialogic interaction that is difficult to duplicate online, even in video conferencing or Skyping" (p. 15-16). To check our own assumptions about face-to-face and online interactions and add to the emerging body of empirical scholarship about online tutoring, we designed a mixed-methods study as we introduced synchronous online sessions to our writing center.

Methods

Study Site

Our writing center conducts approximately 6,500 tutorial sessions a year with writers from across the disciplines. About two-thirds of our appointments are with undergraduate students, typically just under a third are with graduate students, and approximately 65% are with students who identify as domestic or international second-language writers. The 40–50 tutors on staff each semester are undergraduate and graduate students from diverse academic backgrounds. Following scholars like Hewett (2015), who advocates for a "mindful eclectic approach" to teaching writing (p. 5), our writing center recognizes there are many ways to have an effective session. We believe successful sessions enact teaching conversations that incorporate instruction, cognitive scaffolding, and motivational scaffolding and attend to a range of issues, from macrolevel concerns of argumentation, structure, and source use to microlevel concerns of grammar, syntax, and vocabulary (see also Ferris, 2009; Mackiewicz & Thompson, 2015).

Our writing center selected WCOnline as our conferencing tool, largely because, like many other centers, we had already adopted it for scheduling and data management. Using WCOnline's platform, writers join the online session through a link on their appointment-reservation form, which takes them to a portal with a central whiteboard with video and chat features. In training

² Even a cursory search of the WCENTER listserv using terms like *online tutoring*, asynchronous, or synchronous attests to the abiding hunger for information about OWTs.

and practice, we advocate for flexibility within the constraints of the format. For instance, most sessions feature video and audio communication, but some sessions rely on chat in cases of technology glitches or writers' preferences. Some sessions use the central whiteboard, where students can upload or copy text, while other writers prefer to migrate to Google Docs after the initial landing page. Throughout, we aim to be responsive to our writers' needs and preferences.

Data Collection and Participants

After receiving IRB approval, we collected data from February–May 2017 using a mixed-methods comparative design. We recorded online and face-to-face tutorial sessions, collected postsession writer surveys and tutor logs, and conducted interviews with writers and tutors. This article draws primarily on data from recorded sessions and uses surveys and interviews to probe further the trends we found in those sessions and to provide insight into students' satisfaction with the conference settings.

To prepare for implementing synchronous online tutoring, our director recruited a team of volunteers to review OWT scholarship, design an assessment, and pilot our online tutorial services. Given that our volunteers were wearing two hats simultaneously as tutor-researchers, we conducted modified bracketing interviews (Tufford & Newman, 2010), a practice sometimes used in qualitative studies when there is a close relationship between the researcher and research topic. These interviews, which took place before we began piloting OWTs, allowed us to pin down existing beliefs about and attitudes toward face-to-face and online tutoring. Our six tutor-researchers were graduate students with 2.5–5 years of writing center experience; two had online-tutoring experience in both asynchronous and synchronous formats. The tutors came from the fields of writing studies (3), education (2), and business (1).

During spring 2017, our writing center held 2,720 appointments with 1,140 unique clients. Because we wanted to conduct a naturalistic assessment of our face-to-face and online tutorials, we did not aim to collect information from a particular number or group of writers. Instead, the tutors who participated in this study asked writers at the beginning of appointments whether they would be willing to participate. Many writers were return users of the writing center or had regular, ongoing relationships with tutors, but some were first-time visitors. We did not offer a monetary incentive to participants but did offer extra tutoring sessions beyond our center's two-per-week limit.

We video recorded tutorial sessions, using screencasting software to record online sessions and an over-the-shoulder video camera for face-to-face tutorials. After our semester of data collection, we transcribed all 67 recorded sessions. For our analysis, we then selected 24 sessions (see Table 1), 12 online and 12 face-to-face, that were representative of the larger dataset by time of the semester, writer standing, writer language demographics, and tutor (as some tutors' sessions appeared more frequently in the dataset than others').³ We found the demographics of our online services differed somewhat from our traditional appointments; for instance, online sessions drew more graduate students and fewer second-language writers than typically represented in our center's demographics.

Table 1

	Visitor standing		Visitor language background		Visitor status		
	Undergrad	Grad	L1	L2	New	Returning	Regular
Online	7 (58%) ^a	5 (42%)	5 (42%)	7 (58%)	2 (17%)	5 (42%)	5 (42%)
F2F	8 (67%)	4 (33%)	3 (25%)	9 (75%)	1 (8%)	5 (42%)	6 (50%)
Spring 2017							
Unique visitors	834 (73%) cy (percent su	273 (24%)	411 (36%)	708 (62%)	572 (50%)	465 (41%)	104 (9%)

Demographics by Conference Setting

Following the recorded sessions, students were invited to participate in an anonymous survey. A Qualtrics link was sent to students who had participated in online sessions, while a hard-copy version of the survey was handed to those who had completed face-to-face sessions. The surveys (see Appendix A) included questions about students' impressions of the conferencing format, feelings of satisfaction, and demographics. We had an overall response rate of 65%, with 32 of 55 (58%) students completing the online survey and 9 of 12 (75%) face-to-face participants completing surveys, for a total of 41 responses. About 78% of respondents reported experiencing both online and face-toface tutorials. As the final survey question, students were invited to provide their contact information to participate in a 40- to 60-minute semistructured interview.

We conducted interviews with six students. All interview participants completed a survey, and the tutorial sessions for three students were part of our subsample of 24. These interviews (see Appendix B) asked about prior and current writing experiences, use of the writing center, and experiences with and perceptions of their most recent tutorial. One participant was an undergraduate while the rest were graduate students, three of whom were completing dissertations. All interview participants were women; five grew up

³ To our surprise, we encountered greater ease capturing online than we did face-to-face sessions, with our full dataset including 55 recorded online sessions but only 12 face-to-face sessions. Therefore, the 24 sessions in our analysis include all collected face-to-face sessions and a representative subsample of the online sessions because we wanted an equal number of sessions in each method for our comparative analyses.

speaking and writing in English, while one was a second-language writer. One had experienced only an online tutorial, while others had experienced both online and face-to-face tutorials (though not always within the span of this study).

Data Analysis

To analyze the recorded sessions, we revisited our transcriptions on the subsample of 24 to ensure we were accurately capturing conversational features like pauses, interruptions, and overlapping speech (Gilewicz & Thonus, 2003). We used QDA Miner, a software package that allows researchers to code and analyze qualitative data, to examine our session transcripts. We first attribute coded each session (Saldana, 2013) for tutorial setting, writer standing, language background, gender, user status, and tutor.

Because our study sought to better understand pedagogical quality in face-to-face and synchronous online tutorials, we established a working definition of pedagogical quality to guide our analysis. Much scholarship about writing center pedagogical quality has been framed through the lens of successful sessions, often identified by student-satisfaction ratings (Babcock & Thonus, 2012; Mackiewicz & Thompson, 2015; Thompson, Whyte, Shannon, Muse, Miller, Chappel, & Whigham, 2009; Thonus, 2002; Walker & Elias, 1987). Informed by this research, we summarized effective tutorials as being

- flexible in tutoring strategy and content;
- responsive to students' goals and self-evaluations;
- divided into phases of opening, teaching, and closing;
- comfortable and conversational interaction;
- satisfactory to students.

Coding our data for these features allowed us to examine directly the session dynamics, an approach that differs from Wolfe & Griffin (2012), who relied on holistic ratings about session success and the frequency of activities like attending to mechanics, syntax and grammar, or providing elaboration. Our coding process was collaborative. Two researchers independently coded each session transcript. For each transcript, coders made separate passes for conversational tutoring strategies, topical content, discourse phase, and interactional features. The lead researcher helped resolve coding disagreements and establish consensus before entering codes into our final spreadsheet.

We closely followed Jo Mackiewicz & Isabelle Kramer Thompson's (2015, pp. 57–58) coding scheme for conversational tutoring strategies. We applied their codes to identify instruction (telling, suggesting, and explaining and exemplifying), cognitive scaffolding (pumping questions—open- and closed-ended questions that prompted student thinking and response, responding as a reader, referring to a previous topic, forcing a choice, prompting,

hinting, and demonstrating⁴), and motivational scaffolding (showing concern, praising, reinforcing ownership and control, using humor and being optimistic, and giving sympathy and empathy). We applied the individual codes to the data but used the larger categories of instruction, cognitive scaffolding, and motivational scaffolding for our statistical analysis.

We then coded tutorial topical content, using codes such as *argument*, *grammar*, *advisor feedback*, *task*, and so on. As a team, we revised and agreed upon these topical codes and grouped them into the categories macrolevel content (traditional higher order concerns such as task, argument, and structure), microlevel content (traditional lower order concerns such as grammar, syntax, and vocabulary), and metalevel content (discussions of the writer's processes, goals, and available resources). We used these combined categories for statistical analysis.

For both tutorial strategies and content, we counted the number of times each code was applied, as well as the total number of words associated with each code. An example of our strategy and content coding is provided in Figure 1. An undergraduate writer was revising a literary analysis in this conference, and much of the conversation revolved around meeting the assignment expectations and structuring the analysis. In this passage, the tutor shifts between providing instruction about the writing task (using telling and explaining strategies), probing the student's prior knowledge (with a pumping question meant to elicit what the student has learned about incorporating evidence for her analysis), and then returning to providing instruction. The topical content was coded *task* when the tutor discussed genre knowledge that went beyond the immediate activity of providing evidence for this particular section of the literary analysis and *prior knowledge* when the tutor asked the student to recall what she had been taught about evidencing claims.

⁴ We omitted Mackiewicz & Thompson's reading aloud code from our cognitive scaffolding category, as we saw it more often functioning to share text than to provide scaffolding.

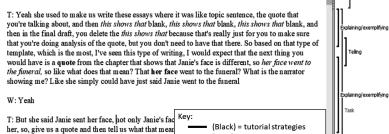
Figure 1 *Example of Content and Strategy Coding*

T: (um) So as far as the structure and where to go from here, so this first point, when it comes to attending the funeral, Janie feels different on the inside than she lets the public know. So because this is a literary analysis, the next thing I probably want is a quote that shows that, right?

W: Mhm

T: Right, so the author writes blah blah blah and then, uh, I remember my freshman high school English teacher taught us that in a literary analysis that the phrase that we always should be thinking is "this shows that." Have you learned, have you learned that way?

W: Yeah I've used it, but I haven't really been learning ...



Because meeting writers' goals is an aspect of tutorial success, we used QDA Miner to retrieve all passages that had been labelled *writer's goal* (an individual code within the category of metalevel content) and coded these as macro- and microlevel goals. For instance "I want to double check the wording and grammar" (OW24) was coded as a microlevel goal, and "Making sure that I did include all the information that the prompt wanted about like, um, explanation of goals and aspirations" (FW15) was coded as a macrolevel goal. In many cases, writers had more than one goal. Statements like "I just wanna maybe like let you give me some information or suggestion for my summary,

(Gray) = topical content

and then help me fix about some grammar" (FW14) were split, with the first clause coded as a macrolevel goal and the second a microlevel goal. Writers typically articulated their goals during the opening phase of sessions, but sometimes goals also arose later in the tutorial.

Again following Mackiewicz & Thompson (2015), we divided session transcripts into discourse phases of opening, teaching, closing. We also added a new phase, which we termed *logistics*: time spent explaining how the tutorial would proceed, introducing the WCOnline platform, pulling up a prompt, locating a file, and so forth. We counted the total number of words and tutor and writer turns in each discourse phase.

To assess tutor-writer conversational interactions, our coding process was particularly informed by Terese Thonus's (2002) study of successful tutori-

ning/exemplifying

u**mping** Prior knowledae als, which suggested that "*interactional features* (*volubility, overlaps, backchannels, and laughter*) *signal involvement of both parties*" (p. 127; italics in original). We coded and counted these linguistic interactional features:

- volubility: total words spoken by tutor and writer, often used to determine conversational dominance;⁵
- overlaps: both simultaneous production of shared thought and tutor and writer interruptions, where one participant attempts to seize the floor from the other;
- backchannels: utterances like "okay" or "mm-hmm" that indicate a listener is attentive;
- laughter: both single-party laughter and simultaneous laughter, the latter of which in particular serves to establish solidarity and affinity.

After establishing these codes and counts, we created an SPSS dataset we used to analyze mean differences between variables in the two settings. We used independent *t*-tests and Mann-Whitney *U*-tests to measure differences between online and face-to-face sessions. Independent *t*-tests were used when the statistical assumptions of equal variance between groups were met. Mann-Whitney *U*-tests were used when the statistical assumptions of equal variance were not met, to correct for this difference. We used a Pearson's chisquare test of independence, which measures association between categorical variables, to examine the relationship between macro- and microlevel goals and session setting. We assessed all statistical results at the 95% confidence level.

To assess students' satisfaction, we relied on postsession surveys from 41 students (see Appendix A for questions) and interview data from six students (see Appendix B for interview protocol). Given the lack of empirical research about students' experiences in online sessions, we wanted to know whether and how the conferencing environment impacted students' satisfaction, in addition to more traditional satisfaction markers like students' overall assessment of the tutorial's success. To analyze the survey results, we used SPSS to conduct *t*-tests and Mann-Whitney *U*-tests with Likert-scale responses to questions such as "How would you rate your recent tutorial in terms of overall effectiveness?" We used open-ended survey responses and interviews to gain qualitative insight into students' experiences of and attitudes toward online and face-to-face sessions.

The results we present below are not meant to be generalizable. We collected data from only one semester and with a small number of writing center users. However, while our sample size may appear small—24 sessions,

⁵ We omitted reading aloud of text from our volubility counts, given concerns that "measures of volubility will be skewed if researchers measure words read aloud in addition to spoken conversation" (Babcock & Thonus, 2012, p. 135).

41 surveys, and six interviews—our linguistic analysis yielded a corpus of thousands of interactions between students and tutors; this corpus allowed us to determine whether there were meaningful differences between online and face-to-face sessions. We hope our results are useful to others who offer similar synchronous OWTs, and we believe our study makes a modest contribution to empirical scholarship about writers' online and face-to-face tutorial experiences.

Results

This study sought to understand how the conferencing environment affected the pedagogical quality and the nature of tutor-writer interactions in synchronous online and face-to-face tutorial sessions. Using data collected primarily from recorded tutorials, complemented by surveys and interviews, we analyzed differences between tutorial strategies and content, writers' goals, session phases, tutor-writer interaction, and students' satisfaction with conferencing environments. The most significant differences between online and face-to-face conferences occurred in conversation content, writers' goals, and the number of words devoted to session logistics.

Flexible Tutorial Strategies and Content

Tutoring Strategies

In their study of successful tutorials, Mackiewicz & Thompson (2015) found that experienced tutors moved fluidly between instruction, cognitive scaffolding, and motivational scaffolding. Given prior concerns raised about the potential for more directiveness in OWTs (Breuch, 2005; Spooner, 1994), we hypothesized that our synchronous sessions would emphasize instruction more than our face-to-face sessions. However, we found no statistically significant differences among conversational tutoring strategies in the online and face-to-face settings. In each setting, more words were associated with instruction and cognitive scaffolding; as shown in Table 2, the top five conversation strategies were explaining and exemplifying, telling, suggesting, pumping, and responding as a reader.⁶ For the most part, these "top five" tutoring strategies align with those in Mackiewicz & Thompson's study, although they found tutors most often used telling, pumping, suggesting, and showing concern.

⁶ Our combined test statistics showed no significant differences; however, the subitems had some differences by setting. In our top five, only explaining and exemplifying was marginally significantly different by setting (U = 37.0, p = .045).

		<u> </u>	<u> </u>	
Tutoring strategy	Total session average	Online	Face-to-face	Independent samples comparison
Explaining and exemplifying	661.0 (532.2)ª	427.2 (330.4)	894.8 (603.1)	U = 37.0 $p = .045^*$
Telling	447.2 (392.7)	569.7 (484.4)	324.8 (235.0)	t(22) = 1.58 p = .13
Suggesting	335.5 (236.8)	333.3 (282.4)	337.6 (193.5)	t(22) = -0.04 p = .97
Pumping	332.2 (217.7)	276.9 (168.1)	387.5 (253.3)	U = 57.0 p = .41
Responding as a reader	262.4 (223.8)	175.3 (140.3)	349.5 (261.7)	U = 46.0 p = .14

Table 2

Comparison of Top Five Tutoring Strategies, Average Number of Words per Session

^a Mean (standard deviation)

* statistically significant at the .05 level

Session Content

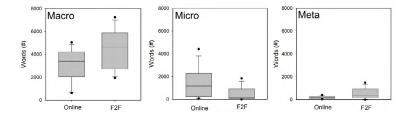
Scholarship about the content of synchronous online sessions has yielded inconsistent results. Some have wondered whether screen-sharing online sessions (Thurber, 2000) or computer-based technologies such as Microsoft Word (Buck, 2008) might emphasize microlevel issues because of spellcheck and the heightened presence of the text. However, Jones, Garralda, Li, & Lock (2006) found text-based chat was more likely than face-to-face sessions to focus on higher order concerns, and Wolfe & Griffin's (2012) holistic raters observed few differences between online and face-to-face content, except that participants using a tablet were marginally more likely to focus on "fixing the writer's paper" (p. 78). We began this study believing tutorial sessions can and should address a range of issues spanning argument to punctuation. We did not expect to find significant differences among the conversation content in our recorded tutorials.

However, we were in for a surprise: our analysis of the data indicated tutorial content was significantly different by conference environment. Figure 2 shows significantly more words were devoted to microlevel issues like punctuation, grammar, and syntax in online than in face-to-face sessions (U = 28.0, p = .01). In fact, we found online tutorials included more than three times as many words devoted to microlevel issues. Conversely, significantly fewer words were devoted to macrolevel issues like argument, development, and structure in online than in face-to-face sessions (t(22) = -2.218, p = .04). However, our

analysis indicated no significant difference by setting in the number of words devoted to metalevel concerns, such as reflecting on the writing process or discussing prior knowledge, U = 45.0, p = .13.

Figure 2

Comparison of Macro-, Micro-, and Metalevel Issues by Word Count



Unexpectedly, given the pattern in tutorial topical content, there were no statistically significant differences by setting in responses to survey items asking students to assess the tutorial's focus on macro- and microlevel issues although these items had among the most variation in responses. Writers in both online (M = 3.25, SD = 1.52) and face-to-face (M = 2.44, SD = 1.01) sessions were generally neutral about whether their tutor "focused mostly on grammar and other sentence-level issues." Furthermore, writers in both online (M = 4.28, SD = 0.77) and face-to-face (M = 4.44, SD = 0.53) sessions were likely to agree their "tutor focused mostly on big-picture issues, like argument and organization." While this finding about differences in conversation content raises more questions than answers for us, we suspect writers' goals for their sessions provide some explanation.

Writers' Goals

We found that nearly all writers came to their sessions with more than one goal and that, aside from a few who wanted to address "as much as possible," most writers had fairly specific goals. When we grouped those into macro- and microlevel goals, we found writers in online sessions were 267% more likely to request help with microlevel issues. We performed a Pearson's chi-square test for independence and confirmed there is a significant relationship between writers' macro- and microlevel goals and tutorial setting (Table 3). To be clear, students in online sessions also requested help with and received feedback on macrolevel issues like organization, analysis, and development. However, while almost every OWT featured writer goals about microlevel issues, only a few face-to-face sessions did. We were intrigued by this result, particularly given that more second-language writers participated in face-to-face than in online sessions. Important, though, students in both online (M = 4.44, SD = 0.67) and face-to-face (M = 4.78, SD = 0.44) sessions indicated on survey responses that they accomplished their writing goals, with no statistically significant differences by setting.

Table 3

Pearson's Chi-Square Test of Independence for Writers' Macro- and Microlevel Goals by Setting

Goals	Online	Face-to-Face
Macrolevel issue	15 (57.7%) ^a	23 (88.5%)
Microlevel issue	11 (42.3%)	3 (11.5%)
Total	26 ^b	26

 χ^2 (1, N = 26) = 6.3, p = .01

^a Frequency (percent)

^b Totals add up to more than 12 because most writers had multiple goals.

While our study does not fully account for why students might bring different writing goals to online and face-to-face sessions, our interview data may shed some light. Of our six respondents, two participants felt online sessions were more likely to be useful for sentence-level concerns. One student-writer explained she had scheduled an online session to review an almost-final draft for a particularly demanding professor who "checks it so religiously that he can find one mistake even though I had three people look over my paper." The session focused on proofreading, and the writer felt "online would be easier to do proofreading than to just think of like brainstorming and thinking of an argument." She added, "I think that would be hard for-like it would just be harder to type out all the notes and everything. I feel like brainstorming is something you more like write down" (student's emphasis). As we discuss in more detail below, this perception of OWTs' limitations was not shared by all writers. However, from our analysis of writers' goals and the few interviews we collected, we can say at least some student-writers perceived online tutorials as being more conducive to microlevel issues.

Session Phases

Prior scholarship (Mackiewicz & Thompson, 2015; Thonus, 2002) suggests the most successful tutoring sessions include an opening phase at the beginning of the session, in which tutors and writers get to know each other, discuss the assignment, and set an agenda. These successful sessions also include a closing phase during which the tutor and writer summarize the

session and set revision goals (Mackiewicz & Thompson, 2015). In addition to coding these previously established session phases, we also coded for phases of negotiating logistics, which could occur at any point in the session (though most often near the beginning) and involved discussing how to proceed with the text or appointment: how to upload a file, how to read the text, how to find a document in the writer's email, and so on. Prior scholarship had not analyzed this discourse phase in relation to synchronous audio-video online sessions; for instance, Wolfe & Griffin (2012) excluded from their analysis conversation that focused on "negotiating the conferencing environment" (p. 72).

As hypothesized, we did find a significant difference in session phases between the online and face-to-face tutoring environments: more words were devoted to logistics in online than in face-to-face sessions (Table 4). However, there were no significant differences between the opening, teaching, and closing phases in the two settings. On average, online sessions lasted 48 minutes (ranging from 33–54 minutes) while face-to-face sessions lasted 42 minutes (25–56 minutes); so while online sessions ran longer on average, they were still within the parameters of our typical 50-minute appointments. In other words, although participants spent more time talking about logistics in online sessions, participants did not significantly alter their attention to other phases of successful sessions.

Table 4

Comparison of Session I huses, include I vanoer of Words per Session					
Phase	Online	Face-to-Face	Independent samples comparison		
Logistics	359.8 (287.0)ª	69.8 (65.2)	$U = 17.0^{*}$ p = .001		
Opening	318.3 (258.0)	498.0 (349.9)	t(22) = -1.68 p = .30		
Teaching	6632.4 (1460.5)	7729.5 (2540.3)	t(22) = -1.30 p = .21		
Closing	177.2 (120.9)	283.0 (351.2)	U = 73.0 p = 1.0		

Comparison of Session Phases, Average Number of Words per Session

^a Mean (standard deviation)

* statistically significant at the 0.05 level

Tutor-Writer Interaction

We began this study knowing comfortable and conversational interactions are important to overall tutorial success (Thompson, Whyte, Shannon, Muse, Miller, Chappel, & Whigham, 2009; Thonus, 2002), yet some scholarship has suggested online tutorials lack the interpersonal features that characterize effective sessions (Enders, 2000; Harris, 1998; Raign, 2013). While much of this scholarship has focused on asynchronous online tutoring, even Wolfe & Griffin's (2012) tutors worried that "the absence of body language and facial cues made online communication more difficult" (p. 82). Although our OWTs featured video, we hypothesized that the online-tutoring environment—particularly during our first semester of learning the new technology—might negatively impact tutor-writer interactions. We were therefore relieved to find our statistical analyses indicated no significant differences among interactional features in online and face-to-face sessions (Table 5).

Table 5

Interactional feature	Online	Face-to-face	Independent samples comparison	
Tutor volubility	2681.1 (1025.3)ª	3282.5 (1474.2)	t(22) = -1.16 p = .26	
Writer volubility	2379.2 (1358.9)	2427.3 (1572.5)	t(22) = -0.08 p = .94	
Tutor interruptions	3.5 (3.1)	1.9 (1.9)	U = 48.0 p = .26	
Writer interruptions	5.1 (3.8)	7.6 (7.9)	U = 57.0 p = .82	
Tutor overlap	7.3 (10.2)	4.9 (8.3)	t(22) = 0.609 p = .55	
Writer overlap	6.6 (7.5)	4.8 (5.8)	t(22) = 0.643 p = .53	
Tutor backchannels	24.6 (26.9)	61.2 (87.2)	t(22) = -1.40 p = .18	
Writer backchannels	23.8 (25.9)	44.8 (59.0)	t(22) = -1.25 p = .23	
Tutor laughter	6.4 (6.8)	6.4 (6.8)	t(22) = -0.34 p = .74	
Writer laughter	8.6 (8.5)	8.6 (8.5)	t(22) = 0.43 p = .67	
Shared laughter	2.4 (2.3)	1.8 (1.4)	t(22) = 0.872 p = .39	

Comparison of Tutor-Writer Interaction

^a Mean (standard deviation)

The ratio of tutor-writer volubility remained approximately the same between settings, with online sessions averaging 1.1:1 tutor-writer volubility and face-to-face sessions averaging 1.4:1. These volubility ratios are in line with scholarship that has found tutors talk about 1.5 times as much as students (Mackiewicz & Thompson, 2015; Thonus, 2002; Walker & Elias, 1987) and suggest these conferences are in fact dialogic and collaborative.

Given the nature of online communication, we hypothesized online sessions would have more interruptions and overlapping speech due to lag and other technical issues. However, we found no significant difference by setting in the number of interruptions or overlapping speech. Our survey responses also yielded no significant differences between students' perceptions of conversation control; students in both online (M = 3.03, SD = 1.09) and face-to-face (M = 3.0, SD = 1.20) conferences responded neutrally about the control of the session conversation.

We found no significant differences between settings in the frequency of backchannels. In each setting, tutors provided more backchannels than writers. Similarly, there were no significant differences between setting in the frequency of tutor, writer, or shared laughter. In these sessions, single-party tutor and writer laughter occurred regularly, and simultaneous laughter appeared in most sessions, indicating participants were comfortable and engaged.

Finally, students agreed in their survey responses that they found it easy to communicate with tutors in online (M = 4.38, SD = 0.83) and face-to-face (M = 4.88, SD = 0.35) settings, with no statistically significant differences. Together, these interactional features of volubility, backchannels, and laughter signal the shared involvement of tutors and writers in these instructional conversations.

Student Satisfaction

Student satisfaction has been an index of tutorial success and an indirect measure of pedagogical quality (Babcock & Thonus, 2012, pp. 152–154; Carino & Enders, 2001; Thompson, Whyte, Shannon, Muse, Miller, Chappel, & Whigham, 2009). While few studies of online tutorials have included satisfaction ratings, Wolfe & Griffin (2012) reported high satisfaction rates across settings. Likewise, our participants reported positive experiences in both online and face-to-face sessions, and we found only a few significant differences between settings. Students' qualitative assessment of their sessions also was positive across conference setting, although some online tutorial participants reported concerns about the technology.

While 100% of face-to-face survey respondents rated the session's effectiveness as 5.0 on a Likert scale where 1 = "Not at all Effective" and 5 = "Very Effective," online respondents rated sessions statistically significantly lower (though still effective, M = 4.47, SD = 0.62). All participants planned to return

to the writing center, and most online participants (97%) indicated they would schedule an online session again in the future. Of the nearly three-quarters of our survey respondents who reported experiencing both online and face-to-face sessions, about 51% reported no preference for tutorial setting; 27% preferred online (in their qualitative comments, some remarked this was the only way they would have access to the writing center); and 20% preferred face-to-face meetings. Similarly, most students agreed their writing improved through the tutorial sessions, but comparative analyses indicated students rated their improvement in online sessions (M = 4.28, SD = 0.81) significantly lower than in face-to-face (M = 4.89, SD = 0.33).

Because we wanted to know more about students' experiences in the digital-conference environment as a component of their satisfaction, we included a post-online-session survey question that asked about the online tutorial's technology, and the majority of respondents agreed they found it easy to use (M = 4.19, SD = 0.86). Online students' responses to an open-ended item about what they liked most about the tutorial coalesced around the themes of convenience of access and editing. Fourteen (44%) survey respondents explicitly addressed the convenience of online sessions; for instance, one student remarked, "Online tutoring saves me time. I live off campus and with online tutoring, I don't have to drive in and find parking, etc. It is just as effective and much easier." Another writer echoed these sentiments: "I liked the convenience and flexibility of being able to do the session right where I am. I also like that the quality of the session is still a lot like going into the [center]."

Furthermore, several writers reported advantages to editing their papers in the online setting. One online participant wrote, "[T]he 'whiteboard' it was very easy for both ends to formulate ideas and sentences." Another reported they appreciated being able to "edit the paragraph while it was discussed with the tutor." Only one face-to-face participant commented on the ease of "editing in my.docx directly" as a helpful component of the session, which may suggest writers were less likely to edit text during face-to-face sessions or that other factors proved more salient to their feelings of satisfaction.

While we received many positive assessments of the online tutorial technology, about one-third of online-survey respondents reported challenges,⁷ particularly with general technical issues, getting to the appointment portal, and formatting papers on the shared whiteboard. Survey respondents noted concerns such as "Technical [i]ssues happened mid-way but they were easily fixed" and "some technology bugs made my computer slow down (the video

⁷ About half the face-to-face, postsession survey participants responded to what they liked least about the session. Of those, two commented on the center's policy of capping appointments at two per week, and another responded, "The walk here" (we hope this writer learned about our online service!).

conferencing plus working with Google Docs). There was a weird echo and/ or time delay between me and my tutor—sometimes we tried to talk over one another." Several participants reported issues sharing and editing their document. One participant stated, "I did not like the formatting of the whiteboard. I did find it awkward to transport my document onto different mediums" and another wrote, "It was hard for me to combine changes from google doc back to microsoft."

Two of our interview respondents raised similar concerns with the online setting. Recalling a session that focused on a course proposal for a teaching portfolio, one participant negatively assessed the text-focused nature of online sessions, saying, "I felt like we were focusing too much on the text . . . and [the online format is] not as creative as face-to-face sessions." She explained, "I feel like our conversations were restricted by what we saw on the screen or the text itself instead of like talk about structure like something more conceptual." Another participant, who had been a frequent writing center user for several years and was in the final stages of preparing her dissertation, felt the online setting negatively impacted tutor-writer rapport. She described some challenges in the OWT related to negotiating turn taking, explaining, "I like to talk so much, and then the consultant always has a lot of opinions, and then sometimes we talk at the same time, much like it's at a stop sign and whose turn is it to go?" We suspect difficulties such as these—lag and echoing in sessions, challenges navigating multiple mediums, and the visual constraint of the screen-may influence the significantly lower assessment of improvement in online sessions reported by survey participants.

While some of our writers experienced challenges in the online setting, about one-third of survey respondents and half of our interview participants reported no particular concerns about or advantages with the online setting. These writers were likely to remark that the sessions were "just like in-person." One interview respondent illustrates this stance. She described her goal for the session: "I was hoping to get feedback on, number one, the outline, but also any ideas about the content and any different directions I could take the research in." She elaborated, saying she "went into the session knowing that [she] was looking for assistance in the writing process, not just looking at a writing document and getting feedback on sentence structure and grammar." In other words, this writer said, "I see the [center] providing an array of supports around the whole process" and indicated she didn't "really feel that [the online format] was different." In sum, while some students reported negative issues related to the technology of OWTs, the majority of our participants were satisfied with the experience, and many felt qualities of the online setting, such as accessibility and ease of editing, contributed positively to the tutorial.

Discussion

Our study compared data from WCOnline's synchronous audio-video online tutorials and face-to-face sessions to examine how tutorial strategies and content, writers' goals, session phases, conversational interaction, and student satisfaction differed by conference environment. We found online and faceto-face sessions showed a statistically significant difference in the number of words related to tutorial content, with more words in online tutorials devoted to microlevel issues and fewer to macrolevel issues, and we also found students were substantially more likely to bring goals about microlevel issues to their online tutorial. Additionally, we found online sessions spent more time negotiating logistics. Our analysis showed strong similarities across settings in use of tutorial strategies, number of words in opening and closing phases, and interactional features. Students reported high levels of satisfaction with both online and face-to-face sessions, and while some writers experienced technical problems that affected their OWTs, more than one-third reported no issues.

Our findings contribute to growing empirical scholarship that better allows us to understand pedagogical differences between tutorial settings. With few significant differences between settings, our study reinforces Wolfe & Griffin's (2012) "provisional evidence that media-rich online conferences can be nearly as pedagogically effective as face-to-face sessions" (p. 83). Both our online and face-to-face settings evidenced a number of attributes of successful tutorials. Tutors in each setting used a range of instruction, cognitive-scaffolding, and motivational-scaffolding strategies (Mackiewicz & Thompson, 2015); and in each setting, students felt their goals were accomplished, thus achieving one of the most important criteria for writing center satisfaction and success (Thompson, Whyte, Shannon, Muse, Miller, Chappel, & Whigham, 2009; Walker & Elias, 1987). Interactional features like volubility, backchannels, and laughter indicated both writer and tutor were engaged in the session (Babcock & Thonus, 2012; Thonus, 2002). These findings help counter persistent perceptions that online tutorials are less conducive to building rapport and suggest that, particularly with audio-video components, OWTs' pedagogical strategies and tutor-writer engagement are similar to face-to-face sessions.

Prior scholarship has yielded inconclusive results about the tutorial content of synchronous tutorials, and our results continue to complicate these findings. For instance, Jones, Garralda, Li, & Lock (2006) found conferences using text-based chat were more likely to focus on macrolevel "issues of content and writing process" while face-to-face sessions "were devoted to textual issues ... of grammar, word choice, and style" (p. 15). Likewise, Hewett (2006) found text-based chat focused on "ideas and processes" (p. 14) although the majority of tutor talk revolved around negotiating the online environment (likely what we would have coded *logistics*) and developing rapport (p. 24). However, Wolfe

& Griffin (2012) found inconsistent results, with one screen-sharing setting lending more emphasis to "fixing" student papers with "relatively little explanation" (pp. 78–79). Our study, using online technology with audio, video, and a shared whiteboard space, found online sessions contained significantly more words devoted to microlevel issues like grammar, syntax, and citation style and significantly fewer words devoted to macrolevel issues like argument and structure. Our analysis indicates these differences in tutorial content may result from students' perceptions of the environments, with more students bringing goals about microlevel issues to online than to face-to-face conferences. Our study encourages us to ask questions about how perceptions of the tutorial environment shape the goals writers bring with them and how those perceptions might change over time.

The majority of our writers were satisfied with their OWTs. We took heart from these satisfaction ratings—regardless of their goals, students felt the tutor met their needs. Furthermore, because we chose to conduct our research in a naturalistic setting rather than in a controlled environment such as in Wolfe & Griffin's (2012) study, our study provides some evidence that the occasional technology glitch or the learning curve common to all new tools had little negative effect on the tutorial. While some students used postsession surveys or interviews to raise issues like time lag, challenges joining the online session, and concerns about text sharing, the majority indicated they would make an online appointment again. We decided to offer OWTs to make our services more accessible to distance students and others who could not easily take advantage of our physical location. In spite of negotiating some new logistics in the online environment, we feel we achieved our educational imperative of offering these students pedagogically effective services that maximize the same approach we use in our face-to-face sessions.

Of course, our study had shortcomings that affect our results. We collected data over only one semester, during our first offering of online tutorials, and in the spring rather than the fall. If we were to replicate this study today, we might find different patterns in conversation content and tutoring strategies as these sessions become normalized and tutors and writers begin to explore advantages of the online environment. Additionally, we had greater ease recruiting online than face-to-face participants for this study, and we suspect factors like the newness of the setting, our own heightened awareness of the online tutorial as a study site, the ability for writers to participate outside the walls of our writing center, and the unobtrusiveness of the online recording (as opposed to the conspicuous presence of the camera in face-to-face sessions) may have created more incentive to participate in the online tutorials. More participants in face-to-face settings may have affected our comparisons of the tutorial environments. Finally, our center had the good fortune to pilot our OWTs with some of our most experienced tutors, all of whom had a minimum of two and a half years of tutoring experience, were graduate students, had self-selected to participate in the pilot, and had received extensive preparation. Conducting online tutorials with less experienced or less voluntarily participating tutors might lead to different results.

Conclusion

Despite these limitations, we hope writing centers in similar contexts and using similar tools will find usefulness in our results. We close with some suggestions for marketing, tutor training, and ongoing assessment.

Since this study was conducted, we have continued to advertise and refine our OWTs. We continue to update instructions on our website to provide writers tips for joining online appointments and troubleshooting tech issues. We created a video that demonstrates the online-tutoring environment, therefore addressing writers' concerns and providing insight into the session dynamic before ever joining an appointment. To capitalize on the convenience many writers mentioned in their postsession surveys, we used social media to market our OWTs on especially cold or stormy days. With targeted advertising to students enrolled in online classes, we continued to expand the reach of these services to off-campus and distance students. Through these efforts, our online writing consultations were visible to students before and after the shift to fully online services prompted by the COVID-19 pandemic.

Although our pilot semester limited online tutoring to a small group of volunteers, the majority of our staff was later trained and regularly tutored online, and all of our staff became online tutors following the COVID-19 pandemic. Many members of our initial pilot group took leadership roles in that staff training, becoming our first local online experts. To prepare tutors for OWTs, we recommend providing opportunities to review existing scholarship and discuss preferences for and concerns about tutorial mode. The reading and reflecting we undertook prior to piloting OWTs helped establish a knowledge base and raise awareness about potential differences in pedagogical approaches. As one tutor explained in an interview:

I think it's important that we're looking at these previous studies about, you know, the difference in turn taking. In online are the tutors talking more or in face-to-face are tutors talking more? To help us think about how we're conducting ourselves the same or differently in an online ses-

sion. And try to remember that it's not—it doesn't have to be different. Reviewing scholarship also gives tutors an opportunity to envision interactions in the online setting. In addition to writing center scholarship about successful tutorials (e.g., Mackiewicz & Thompson, 2015; Thompson, Whyte, Shannon, Muse, Miller, Chappel, & Whigham, 2009), we have found that assigning Wolfe & Griffin's article and sharing findings from the current study have been particularly useful for consultants who have limited experience with OWTs. As another tutor commented in an interview, "It's uncomfortable to not have a sense of how it's going to go. In action. And to try to project and say, 'Well, what do I need to do?' It's like, 'Well, I guess I have to try it.' You know. And be comfortable with things maybe not going as smoothly." Giving tutors opportunities to envision OWTs through reading, observation, and practice with other consultants can help temper initial concerns about tutoring in an unfamiliar environment.

Providing opportunities for individual and collaborative reflection as tutors gain experience with OWTs can also foster flexibility and critical self-assessment. We suggest tutors keep a log of or journal about their tutorial interactions in different modes, which can help track successful strategies, record troubleshooting tips, and reflect on practices during key moments, like the opening and closing phases. We also recommend tutors record sessions for future review. Looking back at her experience with this study as we corresponded while preparing the manuscript for publication, one tutor reflected, "Analyzing my own and my colleagues' recorded tutorials forced me to critically consider my own approaches and practices and adopt some of my colleagues' approaches that I felt were effective. This process had long-term effects on my practices as a writing tutor, and I felt that I was a more confident and effective tutor having participated."

Online educational environments have become increasingly common and familiar-indeed, online education became the "new normal" following March 2020—and our study prompts us to imagine and understand both tutors' and students' experiences and perceptions of online sessions. Even before the shift to remote learning during the COVID-19 pandemic, many of our tutors had experiences with online education, not all of them positive. One consultant reflected in an interview on her online classes and her desire to avoid similar instructional dynamics in the writing center, saying, "I really don't like the format; I think it's really easy to disengage. It's nice that I can do it at home. . .. But I definitely, I think it absolutely affects the quality of the education.... So hopefully we can keep what works in a face-to-face as much as possible, but just attract a new audience." Tutor training can help consultants assess their existing stances toward online education and to repurpose already familiar tools and techniques for the educational outcomes consultants want to achieve. Writing center administrators can take care to reframe the language used to talk about online tutoring, talking with tutors about advantages and limitations of tutorial modes. Furthermore, we can talk with our consultants about the language we are using to present online tutorials to our writers. Given that writers in this study were much more likely to bring microlevel goals to their online sessions, we explicitly encourage our tutors to meet, but also to go beyond, students' microlevel goals.

Finally, we hope our study can be a productive model of collaborative, tutor-participatory research. By collecting data through recorded tutorials, postsession surveys, and tutor and writer interviews and examining tutor and writer experiences in more than one mode, we were able to better understand both our online and face-to-face pedagogies and to explore why differences might emerge. Participating in the study also offered a form of training and professional development for our tutors, who gained experience in research design and data analysis, reflected deeply on their own practices, and became mentors for other tutors new to OWTs. Hearing about writers' experiences through their own words, in surveys and interviews, also helped to alleviate tutors' anxieties about the online setting and to cultivate the sense that "different" doesn't need to be better or worse. Our study helps document students' and tutors' changing perceptions of online tutoring as technology proves more conducive to building rapport and engagement. As online services continue to proliferate, we hope others will continue to investigate the affordances of different OWT platforms and the experiences of tutors and writers in these settings.

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Appendix A: Students' Perceptions of Online and Face-to-Face Writing Tutorials Survey Instrument⁸

To better understand your experience with and attitude toward [online] writing tutorials, we would like you to complete this short survey. Please answer each question by providing the response that most accurately represents your current beliefs and attitudes. The survey should take no more than 10–15 minutes to complete. Thank you for your participation!

Prior Experiences with the Writers Workshop

How often do you visit the Writers Workshop in a typical semester?

This was my first time 1–2 3–4 5–6

7 or more

Have you experienced both face-to-face and online tutorials?

Yes

No

If you answered "yes," which do you prefer? No preference Face-to-face Online

How would you rate your recent [online] tutorial in terms of overall effectiveness?

⁸ Differences between the online and face-to-face postsession surveys have been indicated with bracketed text.

Not at all effective Slightly effective Moderately effective Effective Very effective

Perceptions of [Online] Tutorial Session

Please indicate your level of agreement with the following statements, with 1 = "strongly disagree" and 5 = "strongly agree"

[I found the online tutorial's technology easy to use.] I accomplished my writing goals in the [online] tutorial session. The [online] tutorial session supported my learning. I controlled the direction of the session. I improved my writing through the [online] tutorial session. The [online] format made it difficult for me to communicate effectively with my tutor. My tutor responded to all of my concerns. My tutor focused mostly on grammar and other sentence-level issues. My tutor focused mostly on big-picture issues, like argument and organization. My tutor controlled the direction of the session. I found it easy to communicate with my tutor [during the online session]. I will schedule a [an online] writing appointment again.

[I will schedule face-to-face appointments in the future.]

Open-Ended Response

What did you like most about the [online] tutorial session? What did you like least about the [online] tutorial session?

Writer Demographics

Please indicate your university status: Freshman Sophomore Iunior Senior Graduate Other What gender do you identify with? Female Male Other

Prefer not to answer What is your major? Please list your first language(s): Please list any additional language(s) you speak or write:

Follow-Up Interview

The Writers Workshop would like to talk with some of our writers to gain a more in-depth understanding of your experiences with face-to-face and online tutoring sessions. If you would be willing to participate in a 45–60 minute interview, please provide your email address:

Thank you for completing this survey!

Appendix B: Semistructured Interview Protocol for Writers in Online and/or Face-to-face Session(s)

Introduction: Thank you for agreeing to be interviewed for this project. The interview today should last about an hour, and its main purpose is to get a sense of what you think about writing, one-to-one writing instruction, and online writing tutoring.

What is your major? How far along in your studies are you? What do you plan to do after you get your degree?

I'm interested in your own relationship with writing. Can you tell me: How do you feel when you receive a writing assignment or begin a new writing project? What kind of writing do you like best? What kind of writing do you find most challenging? What does your writing process usually look like? At what points do you decide to talk with others about your writing? How confident do you feel about your writing skills? I'd also like to gather a little information about how you learned to write. *For second-language writers:*

How long have you been writing in English?

Where did you learn to write in English?

Can you tell me about what you experienced when you first began turning in papers for teachers in the U.S.?

For all writers:

What kind of writing did you do before college? Tell me about a writing class you took in high school or college. How were you taught academic writing skills? How do you feel about that writing education?

Tell me about your ideal learning style. In other words, in what kind of situation do you learn best?

Tell me about a class that you have taken recently that you felt really worked for you as a learner. What about it made you learn the best?

Tell me about a class where you struggled as a learner. What made it challenging for you?

I'd like to hear more about your experiences with the [Writing Center]:

How long have you been using the writing center?

What do you hope to get out of a session at the writing center?

Please take a moment to describe your most recent face-to-face session: What were you working on and why did you decide to schedule an appointment?

To what extent do you feel like you accomplished your writing goals for that session?

How did you feel about your writing after you left that session? What did you learn from that session? How did you approach the revision process when you went back to work on the paper? Please describe your ideal face-to-face tutoring scenario.

E.g., How do tutors make you feel involved during a session? What kind of reading/writing strategies work best for you during tutorial sessions?

Please take a moment to describe your most recent online session: What were you working on and why did you decide to schedule an appointment?

To what extent do you feel like you accomplished your writing goals for that session?

Tell me about the online tutorial: How did the online format influence your session (e.g., establishing rapport, setting up the technology, etc.)? What did you like most about the methods your tutor used during that session?

What did you like most about the online format itself?

Some people say that online tutorials direct more attention to sentence-level issues (as opposed to argument, organization, etc.). How would you respond to those people, based on your session?

If you could go back in time and change anything about the session, what would you change?

What other advice do you have for us as we continue to implement online tutoring?

Thank you for talking with me today. Is there anything you'd like to add before we turn the audio recorder off?

Carolyn Wisniewski is Director of the Writers Workshop at the University of Illinois at Urbana-Champaign. Her current research includes a comparative study of online synchronous and asynchronous writing conferences and a study of how graduate instructors from across the curriculum learn to respond to student writing.

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