

2023

Teaching team writing online during and after COVID-19

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Recommended Citation

Myatt, A. J. (2023). Teaching team writing online during and after COVID-19. *Journal of University Teaching & Learning Practice*, 20(2). <https://doi.org/10.53761/1.20.02.09>

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Teaching team writing online during and after COVID-19

Abstract

Collaborative writing assignments are an essential element of teaching technical and professional writing, and they should be included in online writing instruction (OWI). The COVID-19 pandemic was a drastic interruption of regular teaching practices that had the potential of derailing the practice of assigning online collaborative writing projects, which often require a heavy investment of time and energy to manage. As educators and scholars, we must learn from the experiences we had during the pandemic time. For example, amidst the trials and turbulence of the period, we had an opportunity to learn from some of the practices we undertook and identify ways to support post-pandemic team-writing online. This article focuses on the integration of online collaborative writing projects, among which are team-written assignments. Using an archival case study approach combined with reflective writing, several current intersections are explored: the landscape of Online Writing Instruction (OWI); the application of four specific themes to collaborative writing projects; how digital meeting platforms have transformed collaborative writing projects; assessing collaborative writing projects completed during mandated isolation; and how best to support student learning in all of the preceding intersections. Results suggest that agile practices, transparency, adaptability, and virtual makerspaces support online team-writing assignments.

Practitioner Notes

1. Team writing fosters critical thinking skills, collaboration with others, and the application of creative solutions in navigating group dynamics; this type of writing should be a consistent part of online writing instruction.
2. Many employers want to hire and retain people who understand the necessary qualities that ensure successful team-written documents of any mode or media.
3. Fewer than half of online writing instructors responding to a 2021 survey made use of collaborative writing in their courses. This represents an opportunity to enrich and expand online writing instruction.
4. Team writing online should consist of team work and individual work; students report greater engagement when there is a balance of both types of work.
5. Just as physical makerspaces encourage collaboration and experimentation, virtual makerspaces can also offer students safe places that support the development of their collaborative, creative, and critical thinking skills.

Keywords

Team Writing, COVID-19, Collaborative Writing, Online Writing, Online Writing Instruction (OWI)

Introduction

I love digital writing. In the early days of personal computing (the late 80s, from my own perspective), I embraced the opportunity to leave behind the days of pounding on typewriters, using correction tapes/fluids, etc., and real carbon copies, and unsnarling typewriter ribbons. Some readers will have no memory of what I just described, and I can only say on your behalf: thank goodness for that! Having access to digital writing opened the way for me to become more fully engaged in my writing. I worried less about being perfect the first time I wrote something (as would happen when I approached a typewriter with its unforgiving and time-consuming impressions of typos and other mistakes) and rejoiced that I could more easily convey my thoughts and ideas via a computer screen. As the landscape of digital writing evolved, it was possible to join colleagues in writing together to achieve a common goal or product. Formal reports, budget reports, client brochures, policy and procedure manuals – all became enriched by team-written contributions, and when I began teaching in higher education, I integrated my experiences with team-written projects into my course design when appropriate.

This special issue gives attention to current issues in higher education and digital writing in our post-pandemic world. My focus will be on one particular aspect of digital writing: team-writing online. More specifically, I focus on how my team-writing assignments have evolved during and after the pandemic. By doing this, my goal is to accept the challenge of this special issue's call that "as educators and scholars we must contextualise our previous insights, retain knowledge and apply it to current and emerging practices" (Johinke et al., 2022). By examining my teaching practice, I have the opportunity to evaluate the design and implementation of the assignments I use, expand the support I give to students, and think through the assessment choices I make in evaluating student-produced team-written projects.

Context and Background

Collaborative writing assignments are an essential element of teaching technical and professional writing. When such courses are taught online, certain constraints require creativity combined with careful management in order to meet assignment outcomes successfully. When our department developed and implemented a fully online professional writing minor, I sought to craft assignments that gave students exposure to the various types of writing projects collected under the umbrella term of collaborative writing while maintaining the "fully online" element of the course. Knowing that many professional writing projects use team-writing approaches, I focused on developing that type of collaborative writing assignment. At the time the pandemic began, I had only two semesters' worth of experience in teaching those particular courses, and my design of team-written assignments for the courses was still in the prototype stage.

The COVID-19 pandemic was a drastic interruption of regular teaching practices that almost derailed my commitment to assigning collaborative writing projects. However, thanks in large part to initiatives by

Academic Editors

Section: Special Issue
Senior Editor: Dr Jo-Anne Kelder
Guest Editor: Dr Rebecca Johinke

Publication

Received: 20 November 2022
Revision: 29 December 2022
Accepted: 28 January 2023
Published: 22 February 2023

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my colleagues and other scholars in online writing instruction (OWI) as well as lessons learned while teaching during the pandemic, I have been able to implement what I believe to be an improved integration of team-writing in the online courses I teach. As I write this, we have not had a full year post-pandemic, so much research and scholarship are still being conducted and published; I'm still grappling with some of the results of teaching online through the pandemic. Yet, the overall results are positive, and I have learned much.

Literature Review

The landscape of OWI has undergone major shifts during recent years. In the first decade of the twenty-first century, students often considered themselves fortunate if they were able to connect (sometimes via a modem or dial-up connection) to their online course long enough to download instructional content like readings and assignments. Many students experienced what Walter Newbold (2015) described in his preface to the edited collection *Foundations of Online Writing Instruction*, where he talked about teaching online in 1991 using a slow modem and dial-up connections. Yet, there was so much potential! As he put it, “a long journey was begun with halting steps. It was a kairotic moment. Opportunity was at the threshold. Computer networks promised to bring people together, to erase barriers, to promote collaboration” (p. 3). Yet, access has been a promise slowly realised: too many students still have challenges in access to online learning.

For much of the first decade of the twenty-first century, most online writing courses were offered primarily to graduate students, as the challenges embedded in time management and access were considered barriers to success. Those particular barriers have remained; they are probably the most consistent challenges students must overcome if they are going to succeed in their online courses. Given the challenges to achieving equitable access, the first foundational principle of OWI makes total sense: “Online writing instruction should be universally inclusive and accessible” (CCCC OWI Committee, 2013, p. 7). Having access is even more important when incorporating team-writing into an online writing course, given that research shows a relationship between poorly written team essays and technology challenges, among which I would include non-existent or intermittent access issues (Nykopp et al., 2018, p. 551).

Given the issues of access that were prevalent in the early 2000s, many online writing classes became, as Daniel Ruefman (2015) described it, “monomodal, text-heavy course[s] that used ... technologies less than other instructors” who taught face-to-face or hybrid courses, and most of them “embodied a highly transactional pedagogical model” (p. 4). Rightly viewed as “one-dimensional”, many students found online writing courses to be endurance tests that yielded little in the way of learning. Collaborative writing assignments or projects were seldom assigned by online writing instructors. It is not far-fetched at all to view the current landscape of digital writing instruction as having undergone a “paradigm shift” from a dull, non-interactive digital space to a form of instruction that now features an enduring use of diverse online learning platforms and interactive technologies, much as described by Pokhrel and Chhetri (2021) in their literature review on the impact of the pandemic on teaching and learning (p. 134).

However, in a recent survey of online writing instructors in higher education, the CCCC Online Writing Instruction Standing Group (2021) found that only 47% of respondents made use of collaborative writing in their courses (p. 69). This may be because instructors who teach writing online fail to recognise the potential of collaborative writing to enrich student learning experiences

and support the attainment of student learning outcomes. In the same survey, only 35% of respondents identified collaborative writing as among the “the greatest opportunities for students who are instructed in online settings” (p. 84). Given the prominence of collaboration and team work in the skills employers are seeking, this is an under-utilised opportunity for growth in digital writing.

Before the COVID-19 pandemic, OWI scholarship frequently focused on articulating the value of OWI, the ways in which its praxis differs from the writing instruction situated in physical classrooms, and in providing OWI educators with relevant tools for assessment (Krishnan, 2021; Di Lauro et al., 2017; Fredrickson et al., 2015; Hewett et al., 2015; Oakley, 2005). While I cannot begin to list all of the different groups and teams who contribute to the landscape of OWI, several organisations are worth mentioning here: The CCCC (Conference on College Composition and Communication) OWI Committee, which published the grounding principles of OWI in 2013; the Global Society for Online Literacy Educators (<https://gsole.org/>); the Online Writing Instruction Community (<https://www.owicommunity.org/>); and the [CCCC Online Writing Instruction Standing Group](#).

Pre-pandemic, the audience for OWI scholarship was primarily online instructors, and at times, I felt as if we were a closed discourse community for whom scholarship became primarily an affirmation of our praxis and theories. That all changed when all teaching went online in the spring and fall of 2020: teachers who had never assigned any writing unless it was done in class or via paper found themselves desperately needing support from experienced OWI educators and scholars. To its lasting credit, the OWI community responded magnificently, and I, along with many others, benefited from their work.

Terminology

I differentiate between collaborative writing, which I think of as being when one or more colleagues collaborate on a piece of writing, and team-writing, which happens when a team of people collaborate to produce a composition that has one voice but multiple authors. I like the explanation shared by Moga (2017), in which he describes a *group* as a collection of people who all get into an elevator. They have in common their location and perhaps a bit more if they all happen to work for the same company. But if the elevator gets stuck between floors, suddenly they become a *team*: “a **common goal** of “getting out of there” makes this group a team” (para. 3). He continues, “Unlike a group, where each member is expected to contribute separately, the most important characteristic of a team is synergy: the whole is greater than the sum of its parts” (para. 6). See also Oakley, 2004, p. 11 for a good discussion on groups and teams, and Sundgren et al. contribute relevant definitions in their 2020 article (p. 352).

Methodology

As we emerged from the pandemic, I realised that I had an opportunity to take some of the changed behaviours and practices (such as the necessity of using online meeting platforms and adapting concepts like makerspaces) and improve the experiences of students taking my courses in the online writing minor that our department offers. In particular, I found this to be an ideal opportunity to determine the extent to which my teaching practice aligned with established and

recognised principles of online writing instruction and high-impact educational practices (Hewett et al., 2015; Kilgo et al., 2014). My research question was;

How has my online writing instruction changed in response to the pandemic-driven mandates that were enforced at all levels of my university's teaching?

In order to understand how my teaching practices changed, I needed a method that would enable me to interrogate my own teaching practices and reactions whilst paying attention to and learning from my students' experiences. I had a wealth of information and data embedded in assignment development, deployment, and assessment, along with my course announcements and emails to and from students. Also, students kept research and/or reading journals that they shared with me; their candid reflections pointed out ways in which I could more closely align with published OWI foundational principles (Hewett et al., 2015).

When the pandemic struck, like many of my peers, I was hopeful that it would be rapidly contained and we would resume business as usual. However, as the duration of the pandemic extended to span multiple semesters, I began to think of my university's LMS and all of its associated communications (like course announcements and emails to students) as artifacts that could be analysed and studied. I could chart my own evolving practices on professional and personal levels, especially in response to an unknown or emerging situation such as the COVID-19 pandemic. It may even be that the pandemic was the proverbial dark cloud with silver lining, for as a field, writing studies researchers and practitioners have been given a rare opportunity to interrogate and record our responses to a rapidly shifting landscape and learn from those responses.

Thus, in this article, I use an archival case study approach to examine my online Blackboard and Google classroom materials from spring 2020 through fall 2022 as data and documentation, given that I wrote them, and during the pandemic, revised them. They record my thinking - and that of many of my students - at specific points in time. Using this archival case study approach, I identify the application of four specific themes to collaborative writing projects; discuss how digital meeting platforms have transformed collaborative writing projects; reflect on assessing collaborative writing projects completed during mandated isolation; and explore how best to support student learning in all of the preceding intersections, with special attention to team-writing. My primary artifacts are Blackboard LMS course materials (announcements, assignments, and resources) and institutional emails. Additionally, I examined *team-writing assignments*, reviewing their development and implementation in order to evaluate how my own teaching of online team-writing projects has changed.

Supplementary artifacts come from the work students completed for assessment. In one course, students are assigned a *Research Journal* (having weekly entries) at the beginning of the semester, and at one point, they write a progress report that asks them to identify challenges they may have, giving me formative feedback and an opportunity to adjust the course if needed. They also write a *formal reflective essay* at the end of the class; as long as they follow the guidelines for reflective writing, the essays may include anything students deem relevant to their learning. In the second of two required courses in the first-year writing sequence, *students kept a blog* on the university blog space, EdBlogs (using the WordPress platform). Students in my other courses

also post *blogs and reflections* each week; they also write an *end-of-term reflection*. In gathering this writing, I focused only on comments made by students that connected to either the pandemic or to their team-writing experiences. All of the preceding became artifacts to study as I worked on this project.

Results

The pandemic was a watershed event that lasted much longer than anyone had predicted. The time period I assign to the “during” part of the pandemic began in the spring semester of 2020, and it continued through the spring semester of 2021.

An unanticipated result of teaching through the pandemic was refinement and, in my opinion, improvement of collaborative writing praxis for my online students. Through reflective writing and examining my course artifacts (which included student submissions and emails), I identified four themes that underlie the ways in which my teaching practices have changed as a result of persistence in integrating collaborative writing projects in my online writing instruction. I offer an overview here, and I expand on these themes in the Discussion section of this article.

Agility/Adaptability – in identifying this aspect of engagement, I draw on the principles of agile project management, which is characterised by iterative, team-based approaches to development and design that support sound pedagogical praxis (Dewi et al., 2014). Agile project management avoids “traditional command-and-control management methods” by adopting a more organic, interactive and interdependent collaboration of all stakeholders (Kropp et al., 2014, p. 139) that favours “high adaptability to change” (Noguera et al., 2018, p. 111). This approach values people over process, but it can be challenging, because formal structure may be lacking. The lack can be offset by practicing open and constant communication between team members. Work is often done in short bursts of activity during which all team members work closely together to complete a subset of work that will become part of the targeted end project. Being able to incorporate aspects of agility into team projects has supported the work students do on their team-writing deliverables.

Transparency – this term has become a popular buzzword in workplaces and organisations, and for good reason. Describing how transparency affects team performance, the site [glassdoor.com](https://www.glassdoor.com) offers this insight: “Implemented properly, increased transparency [creates trust](#) between employers and employees, helps [improve morale](#), [lowers job-related stress](#) (which is especially important during the Covid-19 pandemic), while [increasing employee happiness](#) and [boosting performance](#)” ([glassdoor.com](https://www.glassdoor.com)). Prior to the pandemic, I seldom let my doubts and concerns about course design and outcomes be visible to students. The pandemic, however, was a phenomenon that affected all of us. I found that students responded well and were actually less stressed when I shared my concerns about how we were all being affected and when I invited students to send me comments and suggestions for how we could achieve course outcomes even while being in quarantine. For example, being open about the changes we had to make to our academic calendar created trust and empathy between my students and me. I now make openness with my students a part of my course communications, such as weekly video lectures and course announcements.

Social Writing – Andrews and Tham (2021) define social writing as “Another approach . . . [that] emerges from more agile practices in collaboration and depends on a well-coordinated network of members. Everyone composes together. Robust digital technology makes such collaboration easy, whether the team is co-located or working across distances. It’s an open process of writing quickly and looking at each other’s writing throughout the work” (p. 65). I observed students working together in such ways; some teams were made up of students who were interning at the same place and were thus co-located and able to sometimes meet in person, while other teams had members who were spread out over long distances. I found, however, that both types of teams used digital technologies to meet and then compose together.

Adapting makerspace concepts to virtual settings: The website weareteachers.com defines makerspaces this way: “A [makerspace](#) is a room that contains tools and components, allowing people to enter with an idea and leave with a complete project. The best part is that makerspaces are communal. The goal is to work together to learn, collaborate, and share. Most importantly, makerspaces allow us to explore, create new things, or improve things that already exist” (weareteachers.com). My students and I have adapted some of the makerspace concepts to our virtual learning environment.

Discussion

I turn now to unpacking and further analysing the themes listed above.

Adaptability

The pandemic required that students and educators alike become resilient (yes, a term often overused but still quite applicable), adaptable, flexible, and technologically savvy regarding ways to accomplish activities like those required in team-written projects. As students and teachers alike persisted in taking advantage of working online, they had to “develop their transferable skills – so often quoted for 21st century workplaces – such as adaptability, flexibility, resilience and digital literacies” (Connor et al., 2021, p. 6). Connor et al. offer a definition of adaptability as found within educational settings, accepting Collie and Martin’s (2016, p. 17) notion that it is a “defining feature of teaching work is that it involves novelty, change, and uncertainty on a daily basis. Being able to respond effectively to this change is known as adaptability” (as quoted by Connor et al., p. 6). I saw students adapt to the ever-changing landscape of the pandemic, and I was and still am impressed by their willingness to forge ahead amidst such changes. Likewise, I became more adaptable in response.

Agility

Agile project management is characterised by consistent, frequent communication. As Andrews and Tham (2021) put it, “The approach is less about individual tasks, individually performed and later blended, than about [viewing] all team members as resources for each other in pursuing a joint goal” (p. 61). As I meet with students in my classes this semester (fall 2022), they frequently mention this aspect of their team work; I routinely hear some variation of “we text each other every day” or “our team Facetimes 3 or 4 times a week to work on our project.” Agility supports flexibility, and I have seen this become a dominant theme in the work my students and I are now doing. One student put it this way in their final reflection: “Within our team project we were constantly communicating and exchanging written information based on our topic. [. . .] Communication was

the key component to this team project (Anonymous, personal communication via Blackboard, May 5, 2021). I have become more agile in my own communication habits, and I am more at ease using instant messaging with students.

Transparency

Collaborative writing projects, when incorporated into a course curriculum, are a subset of collaborative learning, which has been identified as a high-impact educational practice. Kilgo et al. (2014) investigated which high-impact practices netted the most significant gains in undergraduate student learning and development; they found that “[t]wo high-impact practices in particular—active and collaborative learning and undergraduate research—were especially beneficial to students” (pp. 519-20). However, in order to be a positive learning experience, students need intentional and visible support and direction. This is where transparency becomes applicable. The entire process, not just the assignment or work flow schedule, needs to be open and understandable to all.

Transparency includes mutually accepted definitions between teacher and student. Thus, early in the semester, and prior to beginning the first collaborative writing project, students and I unpack some of embedded meanings in this description of collaborative writing:

Collaborative writing is “an iterative and social process that involves a team focused on a common objective that negotiates, coordinates, and communicates during the creation of a common document” (Lowry et al., 2004, p. 72).

While the intent of Lowry et al. was to reach a definition of collaborative writing that would embrace the multiple definitions preceding their work, for my class and me, the definition enables us to discuss strategies for supporting collaborative writing. For example, we share examples of iterative processes, discuss the social aspects of collaboration, identify the way teams differ from groups, and we discuss how to negotiate behaviours, coordinate a timeline and work flow, and establish clear communication, all with the ultimate goal of producing a clear, coherent, and (usually) univocal composition, whether that be a podcast, an infographic, or an informational white paper. At the same time, we discuss past successes and failures of collaboration, using the discussions as a springboard to complete a team charter.

We also look at what employers have articulated about what they look for in their employees (Rios et al., 2020). Quite often, students who waffle about being engaged with a collaborative writing team become more invested when they realise the value of the experience to their future career plans, as is clear in this observation by Rios et al. in their 2020 research: “it is clear that oral and written communication, collaboration, and problem-solving skills are in high demand by employers, with particular emphasis on the pairing of oral and written communication” (p. 81). I usually assign students to research Rios et al.’s claim to see if it remains valid, and invariably, they find additional support for being attentive to becoming skilled writers and team members.

Social Writing and Makerspace Adaptation

One benefit of having a makerspace is having a space for “collaborative learning where educators and students pool their skills and knowledge and share in the tasks of teaching and learning” (makerspacesaustralia.weebly.com/). A sense of experimentation combined with a commitment to excellence supports the exploration offered by a makerspace, officially defined within physical

settings, such as this definition from Campbell University: “Great educational makerspaces embrace the power of collaboration—it is okay for students to consult and assist one another as they explore and solve problems using the resources of the makerspace. Makerspaces not only foster learning through inquiry but makerspaces also support mental rigor” (campbell.edu).

Teaching through the pandemic taught me that makerspaces are not constrained by physical limitations. When we provide students with a safe space (digital or physical) in which they can experience the benefits of makerspaces, we support the development of their collaborative, creative, and critical thinking skills. As Cuizon (2020) noted on the education website Mimeo.com, “Virtual makerspaces are being designed by teachers and tech specialists to keep this type of creative learning possible for students. Like a physical makerspace, a virtual makerspace is focused on inquiry, critical thinking, and problem-solving skills” (para. 3). I adapted certain parts of the team-writing project into low-stakes exploratory tasks. In fact, in WRIT 300, the whole team-writing project was presented as an opportunity to explore and, at the same time, learn how to merge independently generated content into one univocal product.

Virtual Meeting Platforms – Transforming Collaborative Writing Projects

In the spring of 2019, and even in the early days of my 2020 class (January and February), I made use of both Zoom and Google Meet in order to hold virtual meetings with my students. I asked all students to meet with me at least twice during the semester, and the first meeting’s agenda was specifically to introduce students to the virtual meeting platform. Students often expressed surprise and appreciation for the platforms, but in their reflections on the team-writing assignment, most expressed a preference for meeting in person. They also felt that virtual meetings in some way reduced the effectiveness of their work.

Fast forward to 2022: This is no longer an issue. During the pandemic, most students became familiar with virtual meeting platforms, regardless of whether they wanted to or not. In many instances, they adapted more rapidly than their professors. Even though isolated and in quarantine, they maintained connection with each other and the world around them by means of online meeting apps as well as different social media sites. Now, in my post-pandemic work, I no longer need to have that orientation to using virtual meeting platforms. Nor do I need to factor in time for a learning curve for students unfamiliar with communication and group apps. In short, students became more agile, able to navigate unfamiliar digital environments successfully, and this was often because of support from their team. Their agility inspired my own agile practices, such as holding pop-up virtual meetings to discuss their ongoing work or creating an impromptu screencast and sending it out via email to the class.

Assessing Collaborative Writing Projects Completed During Mandated Isolation

Initially, I did not think my assessment of online collaborative writing projects would change significantly. I was comfortable with the practices I had put into place to support my assessment on both individual and team levels. For example, I had students use Google Docs for both individual and team-writing. In this way, I could look at the history of the document and evaluate participation and contribution. I held online group meetings with the team and had each person present some aspect of the work they had contributed; teams also delivered an online presentation of their team’s final deliverables. Students wrote individual reflections about their projects, and they each completed a team evaluation that was factored into their grade for the

project. In one class, the team project was to contribute to a web-based wiki and turn in for my review the communication/responses they got from wiki editors and/or contributors along with a URL for their wiki publication. I felt that my assessment of their work was both fair and rigorous. However, one thing came up regarding the Google Doc history and wiki publication. Whether in person or virtually, if students met to work on the project, it often occurred that one person would become 'scribe' and do most of the typing. This decreased the effectiveness of using document history to determine participation and contribution. In order to address this, I began using project activity logs in which students wrote about their individual contributions and work.

Next to go by the wayside in 2020 and 2021 was meeting with teams collectively (as in, all members of the team would meet virtually with me). Most of my students experienced some aspect of the COVID-19 virus. Students cycled in and out of wellness, and trying to meet as a group became challenging. However, at the same time, students become more comfortable with messaging apps and texting, and on my side, I also became more comfortable and adept at communicating via text. Most messaging apps now have a group chat feature, so setting up a group chat enabled rapid, real-time communication between team members regardless of where they were. How did that change my assessment practice? Frankly, it became more holistic and attentive to transparency, a concept that I have continued to embed in my collaborative writing assignments. I also now require one-on-one meetings that carry a grade value, and students overwhelmingly responded favourably to this change in my teaching. It is a change that continued after the end of the pandemic; it is a part of my teaching praxis.

Benefits of Implementing Team-Written Assignments

What do students gain from undertaking collaborative writing projects aside from (hopefully) good grades and marketable skills? I ask my students to reflect on that question in the last week of our semester, and I often get responses that show increased confidence in their abilities to work with others, to be flexible and adapt to changing conditions, and to communicate expectations clearly. Their responses harmonise with the observations of Krishnan et al. (2019), who noted that "students may use critical thinking skills to support the development of writing goals, engage in collaboration as they determine how to revise text, communicate opinions about the direction of writing, and apply creative solutions for navigating group dynamics" (Krishnan et al., 2019, p. 136). This lines up with the findings of The Partnership for 21st Century Learning (2019), which gathered input from educators, literacy experts, and business leaders to outline what "skills, knowledge, and expertise students must master to succeed in work and life; it is a blend of content knowledge, specific skills, expertise, and literacies" (p. 2).

To support student learning in collaborative writing projects, I have long used the approach suggested by Fredrickson (2015), who designed a study to measure student engagement and learning satisfaction in two online courses, one of which integrated a required collaborative writing assignment while the other did not. As Fredrickson so aptly describes, "The consequences of any design flaw in the group project will be accentuated when implemented at a distance" (p. 138). I developed the chart below (see Table 1) to help me scaffold student learning during the arc of the assignments; some assignments span weeks while a capstone project typically spans the majority of the semester.

Table 1

Supporting Students by Designing CW Projects (Fredrickson, 2015, pp. 138-139)

Design Principle	Strategies	Implementation Examples
1. Team-writing projects need to be appropriately designed.	<p>Include multiple intermediate steps that benefit from both student/instructor interaction.</p> <p>The final product should be one that benefits from social learning, where the group can benefit from the "insights and knowledge of others" (p. 138).</p> <p>Design the project in such a way that the team achieves "higher outcomes/better solutions" than if they were working independently (p. 138).</p>	<p>Team-writing assignments have specific, discrete steps that are taken between the initial exploratory discussions and final deliverables.</p> <p>Teams present the results of their work via an online presentation or Infographic.</p> <p>Each team member completes a source annotation assignment. This affords sharing of different perspectives and interpretations that lead to stronger, more nuanced compositions.</p>
2. Projects should have personal relevance for the students in the course, as engagement increases from emotional investment.	Increase student engagement by allowing teams to select a topic that has meaning and relevance for them.	Each team selects its own topic and prepares a proposal for their final deliverable (usually a formal report, white paper, or analysis).
3. Collaborative writing assignments need to be supported with collaborative technologies. If students encounter technical difficulties in interacting with the team, engagement, learning, and satisfaction all decrease.	Help and IT support should be readily available for all technologies used in the assignment design.	I show students how to use Google Docs and online meeting platforms like Zoom or Google Meet, posting personal screencasts and videos showing them how to use them. Contact information for the IT Dept. is posted as a resource. A discussion board for sharing technology resources is kept open for all students to use.
4. Throughout the assignment or project, individual contributions must be visible and valued.	Incorporate small but meaningful individual assignments at different points in the project.	<p>Individual assignments have grade values and afford opportunities to interact one-on-one with my students.</p> <p>Students keep an online project activity log in which they share individual activity, ask questions, and discuss ongoing team work.</p> <p>All collaborative writing assignments include individual team evaluation feedback and reflection forms that contribute to each student's individual grade for the project.</p>
5. Faculty interaction needs to be personal and meaningful at the individual student level.	Give personal, individual feedback on individual contributions to the overall project.	Because all team projects include individual components and project activity logs, students received ongoing individual feedback for their work during the project.

While Fredrickson reported that students completing the collaborative writing requirement showed a positive impact on student engagement, there were important differences between the two sets of students in the research study that are worth noting. Students who completed only individual

writing assignments reported feeling more engaged and confident in subject acquisition, while students who participated in the required collaborative writing assignment felt more engaged in the course overall and reported feeling better prepared for future leadership roles and career work (p. 137). Another unexpected finding was that students who engaged in collaborative writing assignments felt less supported by their instructor (p. 138). I meet this challenge by requiring students to meet with me twice during the semester, by returning most emails within a few hours of receiving them, and by taking advantage of texting apps when I'm away from email. I believe some teachers have the perception that such actions will be time-consuming. What I find is that I spend less time grading and much less time reviewing revisions. In the end, we all benefit.

Enduring Strategies and Actions

As we know, the pandemic left its mark in many ways. Over the past two years, I have become more invested in teaching team-written compositions, and most students do well with the assignments. Many tell me that they have gained new respect for and appreciation of the value of working collaboratively to write and compose with others. After reviewing my online LMS, reading assignments and student responses, I have compiled this list of enduring strategies and actions. Most of these were refined by teaching through the pandemic, though I continue to aim for design-based coursework that supports student success.

- Reading Groups – I put first-year students into reading groups. While not technically an online writing team, this built community and shared resources for students. They responded favourably to the activities I assigned, most of which were low stakes and designed to give students exposure to constant practice in research writing.
- Collaborative Writing Teams – I assign the teams, basing my approach on my own experience in professional writing situations, where, more often than not, people are assigned by a supervisor to work with a set of people as a team.
- 1-1 Mandatory Meetings – this has become an essential part of my teaching. Although having 2 mandatory meetings with 60+ students may appear time-consuming, in reality, I spend less time on grading because the work my students turn in is consistently on target. I have retained this practice. It is not uncommon for students to meet with me voluntarily each week once they figure out that this is a good, healthy practice. I use my Google calendar's appointment slots feature to give students control over making appointments with me.
- Adaptability is key. Learning is more important than rigidly holding to a series of tasks and/or due dates. For example, peer review took the place of team-written work in my WRIT 440 Spring 2020 and 2021 classes. Due to circumstances connected to the pandemic, I was more concerned that they achieve real learning rather than pushing them to poorly execute a team-writing project. In their final reflections, many spoke positively about the high quality of peer feedback and how much it helped them to learn the process. Additionally, something I'd not considered was that these students, the majority of whom would graduate at the end of the semester and begin their professional careers, felt that learning how to give constructive feedback would be an essential part of their work post-university. A permanent change is that I now give more explicit

attention to helping my students understand the why and how of peer review on a professional level, not just as an academic exercise.

- Screencast videos for weekly activities and how-to's became (and still are) a staple for my online teaching. For team-writing assignments, screencasts show how to merge independently written material and apply revision principles to achieve cohesion.
- Use of Flip (formerly Flipgrid) for student-to-student discussions and to build community was mentioned by many students as something they found particularly helpful as they worked through the pandemic. Now, I continue to use Flip discussions in my courses, and the majority of students reported that they enjoy using the video discussion platform.

Conclusions

A lasting lesson from teaching through the COVID pandemic was that collaborative skills are essential, now more than ever. Incorporating collaborative writing projects (beyond standard peer review, which is markedly different in purpose and execution than collaborative writing) in online writing instruction is essential. This is not only my personal opinion; it applies on a professional level, given that many employers want to hire and retain people who understand the qualities that ensure successful team-written documents in any mode or media. Yet, according to the data shared in this article's literature review from the CCCC OWI Standing Group, (2021), this remains an under-utilised opportunity to not only bolster job marketability for students but to harness the power of social writing.

As mentioned earlier when discussing the benefits of incorporating team-writing assignments, this emphasis on the benefits of collaborative writing is not misplaced. As educators, we need to help our students gain skills in critical thinking, collaboration, and communication; we need to foster creativity that will help them solve some of the momentous issues our global society now faces. The pandemic has taught us lessons that can enable change for the better. Often when thinking of pre- and post-pandemic, we notice that which was lost, and I don't wish to minimise those losses. Yet, we also have cause for hope and change: we can improve our educational practices and offer students opportunities to become participative citizens in their own futures.

Even as Barnett (2012) wrote in his article on teaching for an uncertain and unknown future, I want to be doing "more than helping students to acquire knowledge and understanding and/or to acquire skills and capacities," which of course are needed, but which fall short in preparing our students for "a higher education in the contemporary world" (p. 71) As Barnett puts it, "To capture their pedagogical accomplishments fully requires an additional language. At one level, that language is caught in terms such as self belief [sic], self-confidence and self-motivation" (p. 71). I have seen that "language" develop among my students as they weathered the pandemic storm, and I am confident that their work in my and other digital writing courses will enable them to continue to develop and strengthen that language.

Conflict of Interest

The author(s) disclose that they have no actual or perceived conflicts of interest. The authors disclose that they have not received any funding for this manuscript beyond resourcing for academic time at their respective university.

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