

Sustaining Collaboration for Distributed Research Teams in the Humanities

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Corpus & Repository of Writing ~ <https://writecrow.org/>

Summary

This white paper documents approaches to sustainable collaboration developed by The Corpus & Repository of Writing, a research team working across multiple institutions to build tools for studying and teaching writing. Recognizing that distributed approaches to work have both benefits and challenges, we are consciously shaping our work to develop inclusive and sustainable methods for collaboration.

Grant funding has helped us develop five guidelines for this work:

1. Center sustainable, ethical team-building at the heart of the project.
2. Create an environment conducive to interdisciplinary communication.
3. Create infrastructure that sustains collaboration.
4. Balance project outcomes and team professional development.
5. Position grant writing as a professional development activity.

We still continue to face challenges such as onboarding new team members, developing approaches to leadership for distributed academic work, and keeping our interdisciplinary focus. Our team is currently developing data-driven methods to refine our approaches, and we look forward to sharing what we've learned so other teams can work more sustainably and ethically.

Inclusivity and sustainability from the ground up

The Corpus & Repository of Writing (Crow) is an interdisciplinary, inter-institutional team of researchers, developers, and teachers who study and teach writing using digital tools. As noted in [our project goals](#), we take an inclusive view of language that values the richness and diversity of our students' speaking and writing.

This philosophy of inclusivity extends to our approach to team-building. Our philosophy of inclusivity promotes creating sustainable opportunities for professional development of all team members irrespective of rank, status, expertise, disciplinary orientation, and diversity markers. We understand that maintaining respect and building rapport form the basis for making successful teams and creating a sense of community.

We also understand that addressing diversity should not only be limited to maintaining social rapport, responding to an environmental/societal exigence, or meeting a temporary checklist; it is best addressed when sustainable opportunities are created with tangible, tracked, and material gains. Ethical treatment of all team members takes place by crediting their labor

through both financial and intellectual rewards as well as sustained professional development that helps them balance individual and team growth.

Inclusivity also supports sustainability. If we welcome and support diverse communities, we're more likely to build tools that can be used broadly and will stand the test of time. We've made sustainability an important aspect of developing the Crow platform because we've seen too many projects like ours disappear or cease to be updated when faculty and student researchers supporting development are pulled to other projects or move on to new jobs or institutions. It's unfair to ask people to invest in learning tools that might stop working, or worse, slowly wither away, or worst of all, suddenly change to adopt values incompatible with their communities' expectations.

In short, **how we work is as important as what we build**. We're proud of our tools, but we're just as proud of our commitment to discovering and sharing sustainable, ethical research and development practices. As we refine both our digital tools and our approach to building them, using iterative strategies modeled on user-centered software development, we want to share both.

This white paper summarizes Crow's current practices for building sustainable, ethical academic research teams, including five guidelines developed from our five years of collaboration. We invite you to [contact us](#) to provide feedback, to ask for help putting these resources to work, or to discuss the possibility of collaboration.

The Crow platform: Our tools for teaching and studying writing

The Crow platform began at Purdue University in 2014, when [Shelley Staples](#) and a group of graduate and undergraduate students began building a corpus of student writing from first-year writing classes at Purdue. Simultaneously, [Bradley Dilger](#) was working with a different student group to create a repository of pedagogical materials that could be shared among Purdue instructors. Staples and Dilger realized working together to integrate the corpus and repository would offer far more possibilities for research, teaching, and professional development, and Crow was born.

Development accelerated rapidly when Crow was funded in "[The Work of the Humanities in a Changing Climate](#)," a Mellon-supported project coordinated by [Humanities Without Walls \(HWW\)](#). Crow researchers worked with developer Mark Fullmer to build and test the Crow web platform, which was released in Fall 2018 at the "Writing Research Without Walls" symposium hosted by Crow at Purdue University.

Today Crow has a [larger leadership team](#) and supports an active community using [the Crow platform](#). With the help of support from the American Council of Learned Societies (ACLS), we're currently expanding the number and diversity of texts in the Crow corpus, adding functionality, and developing supporting tools.

Moving from the “Graduate Lab Practicum” to “Constructive Distributed Work” and beyond

A key part of HWW’s “Changing Climate” challenge was the development of a “Graduate Lab Practicum” that sought to “offer a way for graduate students to shape the forms that collaborative practice takes,” positioning them as “equal partners” in research design and practice. This was a great fit for Crow: the project was already using a studio model, asking team members to gather in our lab space to work on the Crow project, and encouraging them to use our equipment and space for other activities as well.

From the start, we wanted to encourage hands-on collaborative work similar to research groups in the natural sciences, where faculty PIs work with undergraduate and graduate researchers on sustained projects. But at the same time, we sought to address the problems of overwork, centralized control, and other unethical labor practices inherent to these research models. To that end, Crow leadership encouraged graduate and undergraduate students to contribute broadly, imagining their engagement as a way to help with skill building, mentoring, and their individual research goals.

Our approach to the HWW “Changing Climate” challenge positioned the graduate lab practicum as a way to articulate the inclusive core principles driving Crow from day one— that is, to move from ideals to documented principles and practices we could refine over time, share with others, and explore with data-driven assessment and research. The work Crow faculty and students completed during that two year funding period forms the basis of what we do today.

Our model for collaboration and mentoring among faculty, undergraduate, and graduate researchers prioritizes balancing the needs and interests of both the Crow project and Crow researchers. We seek to create an environment where students are teacher-researchers who have a stake in Crow research questions, ongoing funding initiatives, and their own professional development, and where both established and up-and-coming researchers are empowered to contribute meaningfully to our project.

Because Crow is an inter-institutional and interdisciplinary team, our approach to collaboration is described as “distributed work” by technical communication scholars. Our team members are not centralized and managed in a hierarchical fashion, with clearly defined roles, but work on a wide variety of projects, often asynchronously, connecting with each other through online networks. While this has many advantages for the project, distributing work can erase individual agency and prevent the growth of cohesive professional identities. With this in mind, we’re developing the practice of “constructive distributed work” (CDW) to actively push back against the negatives of distributed work, and ensure its benefits reach individuals, not only the project. That framework forms the bulk of the practices we share here, and we share more about it below and on [our web site](#).

Guideline one: Center sustainable, ethical team-building at the heart of the project

The Crow team uses three principles derived from scholarship to integrate professional development for team members in our everyday work. We believe all collaborative teams can adopt these principles to make sustainable, ethical team building present in all project work. Here we name and define them by drawing from McMullin and Dilger's forthcoming article accepted for publication in the *Journal of Business & Technical Communication*.

Developing rhetorical confidence

Team members cultivate the ability to argue for the value of their work. Collaboration often involves resolving differences, but also requires the confidence to question assumptions and share ideas. Linda Flower (2008) suggests creating "a distinctive kind of rhetorical community: an intercultural, problem-focused, local public sphere designed for talking about others across difference" (p. 10). For Crow, this is useful because many team members value scholarship in rhetoric (the art and craft of persuasion), intercultural competence (effectively communicating and collaborating across cultures), and/or community engagement (shaping a project through collaboration with organizations such as not-for-profits).

Collaboration often involves coming to consensus, but following Flower, we understand that sometimes our conversations end with differences of opinion. Documenting differences while also resolving conflicts and performing day-to-day work requires that all team members feel confident in their ability to share ideas, advocate for themselves and their projects, and listen to others.

Using a networked model of mentoring

While we maintain the hierarchical leadership structure familiar to academic research teams, we recognize that effective mentoring comes from demystifying and dismantling the barriers presented by exclusively top-down mentoring relationships. Echoing a recent statement on mentoring graduate students from one of our professional organizations (CCCC, 2019), and Beronda Montgomery's research in effective mentoring practices (2017), we see mentorship as the practice of building and sustaining networks of people, resources, and influence.

Every team member should see themselves as both mentor and mentee. Every interaction between team members provides opportunities for mentoring, both formal and informal. As Beth Keller (2019) suggests, approaches to mentoring should focus on investment, not enculturation: helping team members grow their professional identities through learning.

Sustained attention to infrastructure

In order to maintain the networks and capacities we develop, we support individual and collective growth with systems, documentation, and technologies that are always open for review. Ellen Cushman and Erik Green (2010) demonstrate how explicit attention to the physical, online, and human infrastructure involved in everyday work can support not only a

traditional sense of sustainability, but embed reflection about project impacts in team activities. We ask every team member to engage in infrastructural thinking, and ensure everyone can make meaningful contributions by teaching the skills needed and valuing the work involved.

We also acknowledge, following Erin Frost and Michelle Eble (2015), that technical infrastructure and the documentation and methods we develop to support it are not neutral. All of us must be accountable for the infrastructure we develop, and we must continue to negotiate systemic imbalances in power and access through purposeful attention to its gaps, bottlenecks, and limitations. If we do not, our work will reflect and maintain the systemic inequities of academic research embedded in institutional infrastructures (Jones, 2016). Because this responsibility is shared, we empower dialogue about Crow infrastructure between all members of our team, and invite everyone to adapt and revise our infrastructure as our projects meet benchmarks and evolve.

Guideline two: Create an environment conducive to interdisciplinary communication

Crow is an interdisciplinary team, including people from diverse research traditions in writing studies, applied linguistics, rhetoric and composition, second language studies, and technical communication. While we share many ideals, we use different methods to study and teach writing. This varied expertise sometimes results in discursive mismatches and disagreements about the language and trajectory of Crow work.

We encourage team members to see these differences as opportunities for interdisciplinary learning and the cultivation of unique methods for our ongoing research.

HWW funding supported Crow's development of a set of best practices for listening, sharing, and contributing to ongoing conversations in writing, planning, and platform development. These best practices, informally described as "How to Crow," begin with some basic guidelines that shape what it means in practice to communicate with each other as Crow researchers:

- A. Share your work early and often.
- B. Be supportive and constructive.
- C. Voice concerns and questions with group members, with project leads, and, as necessary with leadership.
- D. Ask for help or feedback when you're having trouble.
- E. Acknowledge successes, task completions and questions.
- F. Report unacceptable behavior.

Taken together, these best practices help team members confront the challenges inherent in distributed work—especially interdisciplinary academic work. While these principles may seem general, even common knowledge for good workplace interactions, enacting these best practices can be difficult—especially for students and faculty working across barriers of cultural and disciplinary difference. New Crow team members often observe that our attention to developing rhetorical confidence is the first time they have had explicit training in

interdisciplinary communication. It is seldom taught in classrooms and not often engaged in workplaces.

We are currently developing a resource that explains our approach to sharing these best practices with our team and using them to spark conversations about professional growth.

Guideline three: Create infrastructure that sustains collaboration

Like good communication, digital collaboration isn't intuitive, and the norms for contributing are usually invisible and learned through trial and error. Rather than expecting new team members to learn best practices on their own, we address digital collaboration in depth in internal documentation. That is: it's not enough to offer technical instruction in the use of digital tools. Indeed, we think it's more important to develop conventions that ensure how people use tools is reflective of the core principles that guide our project.

Use collaborative writing tools to position writing as conversation

We use Google Docs for most collaborative writing, because it allows multiple researchers to work on a single document, and in a manner that highlights individual contributions. Our best practices include the following:

- A. Contribute in a manner that identifies changes being made. For Google Docs, that means using comments and "suggestion mode."
- B. Use both in-document comments and meetings to discuss in-progress writing and consider different ideas.
- C. Preserve drafts—whole documents, tricky sections, even individual sentences—so it's possible to discuss changes and revert them if needed.
- D. Review the progression of documents over time to show how different ideas, styles, and approaches come together.

Use an integrated team communication platform to coordinate work

Our use of the team communication platform (TCP) Basecamp further supports discussion-heavy collaboration, even when team members work at different times or in different locations. By providing a single hub for to-do lists, schedules, and communication related to our project, a TCP offers both efficiency and community—with minimal use of email. As above, we shape our approach with conventions and best practices, including:

- E. Create separate team spaces as needed, but ensure there is one common space all project members can access.
- F. Break projects down into separate tasks that include deadlines. Use conversation to ensure contributors understand their responsibilities.
- G. Whenever possible, include links to relevant Google Docs or other digital tools we're using for work (e.g. GitHub, our WordPress weblog).
- H. Keep conversations visible. Avoid private messages ("Pings") to ensure it's easy to add others to projects over time.

- I. Follow all of our communication best practices. Ensure Basecamp is a space team members feel well-supported and valued. Applaud good work and offer help when it would be useful.

Develop conventions and practices that make work constructive

Selecting platforms for collaborative writing and team communication established the particular tools the Crow team would use. We then identified best practices that facilitate participation by ensuring team members are able to contribute to distributed work:

- J. Position independent asynchronous work as the norm, but recognize when meetings and shared work times—perhaps between a subset of people working on a given project—are also valuable.
- K. Establish infrastructure for sharing schedules, and recognize that scheduling requires thinking across time zones and irregular availability.
- L. Publish meeting agendas well in advance of meetings. Asking for input broadly. During meetings, take careful notes that can be shared with those not able to attend, or others who join projects mid-stream.
- M. Ensure action items that arise from meetings are well-represented in Basecamp as to-do items with appropriate deadlines.

Guideline four: Balance project outcomes and team professional development

Our core commitments to interdisciplinarity, ethical labor and leadership, diversity, and sustainability are realized with a tool our team calls “The Matrix.” At the beginning of each academic term, every Crow researcher, from PIs to undergraduate researchers, maps their work onto a table shared across our team:

- Current Crow projects, responsibilities, and interests
- Research, teaching, and service commitments outside Crow
- Professional development goals — whether or not they are Crow related
- Leadership and mentorship responsibilities and goals

Keeping the complexity of this work visible allows Crow leadership to make decisions that balance Crow research and development goals, support the growth and well-being of our team, and help individuals thrive. Crow researchers can also identify potential collaborations and learn from the ways others describe their work. For new researchers, seeing visible Crow researcher profiles in the Matrix helps them find potential collaborators or mentors. The visible landscaping of skillset and research engagements in the Matrix promotes new opportunities.

Crow PIs then consult with each other and meet with individual team members as needed to finalize team and individual assignments. We balance ensuring project outcomes with team professional development with four best practices:

1. Rotate project leadership responsibilities among team members.

2. Foreground opportunities for networked mentoring.
3. Help team members establish cohesive professional identities as they shift between role and tasks.
4. Encourage exploration. Prioritize individual learning even when new skills and competencies don't directly benefit the team.

Given how important The Matrix is for our team, we're developing a separate resource to allow other teams to use it; we'll share that here soon.

Guideline five: Position grant writing as a professional development activity

Grant writing is important for the Crow team in two ways. First, it provides the resources we need to build our digital tools, by allowing us to hire developers, offer small incentives for participation to our user community, and provide research assistantships to Crow team members. It's hard to say which of these is the most important use of sponsorship.

Secondly, grant writing is a key method for helping Crow team members develop professionally. Writing large external grants, especially, provides the opportunity to practice and get feedback on both specific writing skills, such as writing a project narrative or budget summary, but also less easily articulated professional experiences such as collaborating with administrators or planning inter-institutional activities. By asking Crow team members to participate actively in this work, our leadership gets their input, too.

The articulation and sharing of a team wise grant strategy also helps Crow team members understand the decision-making of Crow leadership. While we maintain a robust strategy for larger funding awards, we also seek small internal grants that support faculty and graduate students with travel, research fellowships, and seed grants. Developing ethical and reciprocal labor practices that support undergraduate and graduate researchers cannot wait for projects to be "fully funded." And in the same way we value individual learning even when it's not directly related to team building, we help Crow researchers write grants for their own work.

(For more on our approach to grant writing as professional development, see "Further reading" below.)

Continued challenges

As we continue to grow the Crow platform, and expand our team to accommodate new partners at new institutions, we are still working iteratively to address ongoing challenges inherent to developing sustainable, ethical approaches to collaboration.

1. **Creating good documentation, keeping it up to date, and ensuring people read it.** New Crow team members have to learn how to write effective documentation, and have to be reminded of the importance of documenting meetings, processes, and products in visible ways (that is, in spaces where others can access it). Even Crow veterans struggle with the time commitment involved. And everyone on the Crow team faces the

time-consuming challenge of writing effective documentation — it must be reviewed, tested, and revised.

2. **Securing funding that provides team members time to work.** While we are good at grant writing, funding from professional organizations in writing research is limited: the largest professional organization grant we know of is \$10,000. Federal funding does not compare to what's available in the natural sciences, and internal funding is limited too. This might be the sharpest barrier to advancing our work: part time positions come with increased preparation time and outside scheduling commitments. To be productive, undergraduate students need paid internships, graduate students need full-time positions, and faculty need course buyouts.
3. **Balancing traditional, more easily counted measures of productivity with less easily quantified but still critical mentoring goals.** We don't promise a solution for this problem, which is well-known for academics, and in fact the Crow approach may intensify it given our commitments to mentoring (which is less valued in academic work than it should be), grant writing (too often ignored by the humanities in tenure & promotion), and interdisciplinarity (which increases the likelihood others won't value our work). We value publications, fellowships, grants, and job placements, but we get them because we prioritize individual growth, onboarding, and learning from each other.
4. **Successfully and efficiently onboarding new team members.** Because the Crow team has particular ways of working which are radically different than traditional humanities research, onboarding is time-consuming. Researchers who work with Crow for a single semester—a typical way internships and independent studies are structured—may have limited productivity. Crow team members dedicate considerable energy to onboarding but may get little reward for it.
5. **Sustaining a team spread across multiple locations and times.** Distributing the Crow team across multiple sites requires what scholars call *coordination*: cross-disciplinary work that stitches together divergent activities, often using technologically mediated networks. We build our tools by coordinating effort and content across distance and time. Hence our practice of “constructive” distributed work, which seeks to minimize the de-skilling and erasure of individuality that can often come with distributed work.
6. **Developing distributed leadership models.** Developing a coherent team strategy that works across different contexts is labor-intensive. Until recently, most decisions about the direction of Crow were made by Staples and Dilger. Because we have recently expanded our leadership team, we are now seeking new approaches to consensus-building that ensure a truly collaborative leadership approach.
7. **Maintaining attention to interdisciplinarity.** Though we have taken concrete strides to develop a successful interdisciplinary team, working across disciplinary, institutional and international boundaries is never easy. Onboarding, for example, requires continual education about disciplinary differences. And when team members take on new roles, their new responsibilities and goals may introduce additional constraints that make the time-consuming work of listening to other disciplinary perspectives even more challenging.

Further reading

Above, we refer to several academic sources, including some scholarship from the Crow team.

Crow team members Hadi Banat, Michelle McMullin, and Bradley Dilger conducted a small internal study and wrote a short article for SIGDOC 2020, describing our approach to using grant writing to support professional development. [Watch our summary video](#) or [read “Initiating and sustaining student professionalization through grant writing” itself](#).

An article describing constructive distributed work, authored by McMullin and Dilger, was published in the *Journal of Business & Technical Communication* in September 2021. Please [contact us](#) if you need access to a preprint of “[Constructive distributed work: An integrated approach to sustainable collaboration and research for distributed teams](#).” As we note above, the [Crow web site also includes resources](#) intended to help research teams identify and implement their own approaches to constructive distributed work.

The [Conference on College Composition & Communication \(CCCC\)](#) is the largest professional organization in writing studies, focusing on writing in higher education, especially in colleges and universities. We refer to their “[Statement of professional guidance for mentoring graduate students](#),” authored by a team led by Dr. Temptuous Mckoy, because it is generally consistent with our approach and includes many sources we cite often. (The CCCC is part of the [National Council of Teachers of English](#).)

We value Ellen Cushman & Erik Green’s “**Knowledge work with the Cherokee Nation**” for its development of a “praxis for new media” that includes “scaffolding active work,” helping to bring infrastructural thinking to writing studies.

Linda Flower’s ***Community literacy and the rhetoric of public engagement*** includes an in-depth framework designed to help writing teachers and writing programs work with community organizations such as not-for-profits in an equitable, sustainable fashion. The Crow team has turned to Flower’s approach to help us build our own team and to shape our outreach efforts so that we are genuinely responsive to the teachers and students so important to our project.

Natural scientist [Beronda Montgomery](#) is well-known not only for her research in biosynthesis and genetics, but her evidence-based approach to studying equitable mentorship in science communities, as in “**Mapping a mentoring roadmap**” and other publications. The Crow team looks to Montgomery not only for this scholarship but admires her ability to share it with the public.

We cite several technical communication scholars above, recognizing the recent attention to social justice in that field. Besides the article “**The technical communicator as advocate**” cited here, Natasha Jones’s leadership in the [Association of Teachers of Technical Writing](#) has been a model for others. Erin Frost and Michelle Eble’s “**Technical rhetorics**” underscores the importance of creating technical documentation that helps embed the Crow values in the infrastructure that supports onboarding and other critical work.

Academic citations for these sources

[Zotero tags: (Banat et al., 2020; Cushman & Green, 2010) (McMullin & Dilger, in press) (Flower, 2008; Frost & Eble, 2015; Jones, 2016; Mckoy et al., 2019; Montgomery, 2017)]

Banat, H., McMullin, M., & Dilger, B. (2020). Initiating and sustaining student professionalization through grant writing. *Proceedings of the 38th ACM International Conference on Design of Communication - SIGDOC '20*. Special Interest Group on Design of Communication, Denton, TX. <https://doi.org/10.1145/3380851.3416737>

Cushman, E., & Green, E. (2010). Knowledge work with the Cherokee nation: The pedagogy of engaging publics in a praxis of new media. In J. Ackerman & D. Coogan (Eds.), *The public work of rhetoric: Citizen scholars and civic engagement* (pp. 175–192). University of South Carolina Press.

Flower, L. (2008). *Community literacy and the rhetoric of public engagement*. Southern Illinois University Press.

Frost, E., & Eble, M. (2015). Technical rhetorics: Making specialized persuasion apparent to public audiences. *Present Tense: A Journal of Rhetoric in Society*, 4(2).

Jones, N. N. (2016). The technical communicator as advocate: Integrating a social justice approach in technical communication. *Journal of Technical Writing and Communication*, 46(3), 342–361. <https://doi.org/10.1177/0047281616639472>

Mckoy, T., Rule, H., Soto, K., Kumari, A., & Opel, D. S. (2019). *CCCC statement of professional guidance for mentoring graduate students*. <https://cccc.ncte.org/cccc/resources/positions/professional-guidance-for-mentoring-graduate-students/>

McMullin, M., & Dilger, B. (in press). Constructive distributed work: An approach to sustainable collaboration and research for distributed teams. *Journal of Business and Technical Communication*.

Montgomery, B. L. (2017). Mapping a mentoring roadmap and developing a supportive network for strategic career advancement. *SAGE Open*, 7(2), 215824401771028. <https://doi.org/10.1177/2158244017710288>

We'd love to hear from you

Our approach to building digital tools has always taken an iterative approach. We regularly revise, extend, and refactor our work based on input from Crow team members. So we'd love to hear from you. [Use our feedback form](#) or [email us](#).

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The Crow platform is based on two projects driven by graduate students at Purdue University. Scott Partridge and Heejung Kwon developed the Purdue Second Language Writing Corpus with Shelley Staples in 2014–15. PSLW data and code was migrated to the Crow corpus. We also acknowledge an earlier project led by graduate students in rhetoric and composition, the Collaborative Online Instructor Network (COIN), whose design influenced the Crow repository development.

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