Chapter 8. Research and the Rhetorical Forms It Takes

- Your 5th grade science fair experiment
- A viral video of high school math students rapping the quadratic formula
- A five-minute conversation with a family friend about a summer co-op position at their company based on your community service

These are all ways that research circulates over time, in different locations, through interactions among people and things. This chapter takes into account the ways that research, oftentimes research-in-progress, circulates. **Circulation*** is a contemporary reframing of the rhetorical canon of **delivery**. Delivery, in a classical Greco-Roman rhetorical tradition, was primarily concerned with speakers who, in real-time, stood before reasonably attentive audiences to speak persuasively about matters of civic concern. Over two millennia, as writing systems gained legitimacy and as digital media expanded and flourished, so too did the means of delivery multiply. In today's mediascape, delivery remains relevant, but the mechanisms of delivery have shifted because audiences are themselves producers of recirculation and uptake. That is, someone may read an article and re-post it, watch a video and send it on. Secondary circulation is not a new phenomenon, but it has intensified with the rise of social media and the everyday documentary impulses that proliferate streams of social media. People have their mobile devices out, capturing and relaying the richness and wonder (and also ordinariness and banality) in their surroundings.

To put a finer point on this phenomenon of secondary circulation (i.e., uptake and recirculation), Jim Ridolfo and Dànielle Nicole DeVoss introduced the concept of **rhetorical velocity**. As they explain, rhetorical velocity goes beyond delivery to offer "strategic theorizing for how a text might be recomposed (and why it might be recomposed) by third parties, and how this recomposing may be useful or not to the short- or long-term rhetorical objectives of

Effective research moves into and throughout the world. Delivery and circulation pinpoint how this movement happens.

the rhetorician." For a researching writer, this means sharing research in such a way that encourages others to do things with it, including to recirculate it. When others take up the work and continue its circulation, rhetorical velocity increases. The reach and influence of the research stands a greater chance of making a difference in the world.

With the goal of setting research in motion, this chapter begins by acknowledging and then challenging two powerful myths connected with research writing. The first myth is that researchers should only share their work with audiences at the end of a research process. The second myth is that beginning researchers should circulate their work only in small circles, to limited audiences, such as the confines of a class and a teacher. Of course, myths emerge from the world around us. These myths in particular about research writing prevail because there are strong cases to be made for circulating research after the study is fully formed and the work completed. Furthermore, circulating research-in-progress to small, supportive, attentive audiences, such as are customarily available in association with a writing class, also makes sense. These myths prevail, in other words, because there are kernels of long-established wisdom etched into them. And yet, we seek here to open these myths with the goal of acknowledging what becomes available when we share about works-in-progress and when we engage audiences broader than the classroom.

Our aim in challenging these myths is to expand perspectives on the potential of rhetorical delivery to clarify and activate research activity as it unfolds. Toward this goal, consider our counter-principles:

Try This Together: Delivery and Circulation (30 minutes)

In a small group, develop definitions of delivery and circulation. How are these terms similar? In what ways do they identify something different? What do you think they mean for researchers who are interested in sharing their work with others?

Discuss how you have participated in rhetorical circulation. That is, have you ever read or viewed something, then passed it along to someone else with the purpose of asking a question, teaching them, deepening their understanding, or changing their mind?

1. **You can, as a writing researcher, share about your work at any moment in the process.** You can write a pre-proposal in which you sketch possible lines of inquiry. You can prepare and deliver a three-minute presentation to your class or your research group at the moment when you are beginning to gather, read, and annotate sources. You can develop for a gallery crawl a draft of a poster that displays decisions you have made about research design, including the questions that interest you most and the potential complications you foresee. With each of these (and many other) possibilities, research is kept social, and the interactions can be generative for you, for your research team if you are collaborating, and for others who are probably working through comparable research processes themselves.

   Delivering the beginning stages of a work-in-progress early and often can help you refine your sense of audience and purpose. The questions you receive will help you make decisions about where to expand, what context to fill in, and what is missing or perhaps understated. It's also possible to revisit a research project long after you believe it was finished and sent off into the world. Five and ten-year retrospectives—look backs—at a research project and asking of it freshly—Why did this work matter? What would I have done differently? How would a comparable study need to be done *now,* were it to be undertaken again?—these and other reflective questions help researchers focus on the longevity of a study's significance, setting it in relationship to time as well as opening new possibilities for continuing or renewed research.

2. **You can, as a writing researcher, share about your work widely, even while it is in-progress or otherwise unfinished, generating and circulating status updates that invite audience engagement.** It may feel risky, yet writing about in-progress research can open your work to outsider feedback, lead to potential collaborations, and build confidence in how you give language to specialized concepts. This is not quite the same as saying you should share everything about the research with other people or that you should post everything about it online. But some measure of practice with deliv-

ery and circulation while a project is underway can help you see it as rhetorical work, connecting it with people who are curious about it. When this happens, research writing can become connected to other stakeholders.

We also want to stress the careful consideration that must go into sharing in-progress work, as this ties in with the discussion of ethics in Chapter 2. Ethical delivery of in-progress research may be focused and invitational, such as by selecting a narrow issue in a study and inviting perspective. It may also proceed with a goal of keeping your work **public facing**, or aimed toward an external audience, and accountable to people who are not researchers but whose lives may be improved by the questions you are asking and what you are learning about those questions. Ethical delivery of in-progress research seeks to emphasize the value of audiences who can participate in the work. We would caution you against disclosures of frustration or complaint about your research process or findings, though missteps, failures, and complications certainly do happen in research and warrant acknowledgement when we are sharing about our work. Finally, a leading goal for wide delivery of in-progress research is to refresh perspective on the classroom as a temporary scene. Research activity often exceeds the length of a semester or quarter.*

> The rhetorical approach to research inquiry we have modeled seeks to keep porous and open the seemingly bounded limits of the writing classroom and the arbitrary time frame of a semester or quarter.

Try This Together: Brainstorming Delivery (15 minutes)

With a partner and using your research topic, question, data collected, or project thus far, generate a list of five to ten ways that you might share in-progress work.

Be sure to consider different kinds of stakeholders—not just your campus community, but your neighborhood, city, hometown, government, workplace, educational, and community groups. Who is affected by your research, and who might want to know a bit more about it? Who would you like to have in an audience that would help you think differently about your research? Then, consider what forms sharing such in-progress work might take. What are some flexible delivery options that an in-progress project might have that a fully finished project does not?

■ The Rhetorical Forms Research Takes

Form usually refers to shape and structure. Certainly there are shapes and structures that have become conventional in interpersonal communication, in workplace communication, in civic and legal communication, and in academic communication. Rhetorical forms, or genres, reflect shapes and structures that have evolved to reflect the values of a particular discourse community. For example, for a legal briefing to be recognizable as a legal briefing, it must assume the shape and structure of legal briefings that have circulated before it. Such a document reflects the unspoken values and expectations of a legal discourse community—the lawyers, judges, and clerks whose communication practices constitute this significant domain of activity. Missing the mark on a particular form risks alienating the discourse community; straying from formal conventions can mean offending important people among the document's audience.

Form becomes rhetorical when it takes into account the communication situation: purpose, audience, context (including forms that have come before it), and timing. This means that form is slightly flexible; rather than adopting a universal, fixed, unchanging view of form, it's better to regard shapes and structures as living, evolving entities. Savvy, effective communicators (rhetors) take this into account each and every time they write. Noticing the evolving qualities of forms, as well as opportunities for new forms that make use of all varieties of media, amounts to **rhetorical awareness**. And it is with rhetorical awareness in mind that we undertake in the remainder of this chapter to introduce general conventions for forms associated with research writing: the IMRAD (an abbreviation for Introduction, Methods, Results, And Discussion) research report, the short form presentation, and the research poster.

■ The IMRAD Research Report

Research reports are the most common form for research delivery and circulation. Although they are written documents primarily constituted by words, they often include graphs, charts, photographs, or figures (see Chapter 7). It is customary for research reports to introduce and contextualize the study,

lay out the study's methods and findings, and discuss its consequences, which can include applications, proposed action steps, and prospects for additional research. The scope, or length, of research reports can vary, ranging from abbreviated reports of a few pages, sections, or installments, to larger reports of a few pages, to elaborate accounts of 25 pages or more. What we hope to make clear is that there is no one-size-fits-all research report. Research reports are often similar to one another; however, as rhetorical situations change, often reports do, too. It's important to note conventions are a starting place from which your research writing can adapt to specific situations.

As a general framework for research reports, or what are sometimes called **research papers**, consider the IMRAD research report as one common model. In many STEM-oriented disciplines, the IMRAD report stands out as a basic form. Some have argued it is too basic or too reductive. It is crucial to approach the IMRAD report as an exceedingly basic structure onto which other more nuanced choices should be applied. Many IMRAD research reports will include the four basic sections of introduction, methods, results, and discussion as subheadings, as this can aid readers in finding their way. Here we describe what goes into each of those sections:

- **Introduction:** The opening section of a research report establishes the purpose, or rationale, for the research that follows. It can do this by stating an **opportunity** (or gap in the research), a **problem** the research responds to constructively, or a **question** or series of questions the research answers or deepens. Opportunities, problems, and questions work differently from one field to another, yet they can motivate research in any field. Given this situation, researchers should introduce their work by orienting it to discipline-specific contexts and problems.

- **Methods:** Methods sections account for research design, detailing the choices that go into the ways the researcher has worked. Methods may note timeframes, techniques for recording and coding data, and the methodology—the values backdrop that makes your approach transparent to your audience and to yourself (see Chapter 1). Discussing the **methodology** signals an understanding of disciplinary values, connecting your choices to choices that have been made by others in related

research. Coding schemes (Chapter 4) and research memos (Chapter 5) help establish a record of activity that may inform a methods section.

- **Results:** The results section of an IMRAD research report details what happened as the methods were enacted. A results section aligns neatly with laboratory experiments or computational scripts that may be run once, adjusted, and run again. Results, in such cases, can vary. The broader view of results is, in effect, what happened. Results sections account for the activity that followed from the methods presented in the previous section.

- **Discussion:** Discussion is where meaning is opened up and explored. Discussion sections simply and directly attend to questions of consequences by asking, **So what?** This is the section of a report where the research writer interprets the results and makes a case for the results as significant, limited, or altogether failed. Especially when results are limited or failed, there are ample opportunities for renewing questions, refocusing prospective studies, and really learning—establishing **new knowledge** that can be insightful for stakeholders.

Several research report variations stand out in relation to the IMRAD report once this simple shape and structure is established. In some humanities disciplines, texts themselves are the primary form of data. Working with texts—interpreting them, putting them into conversation with one another, and analyzing them for significance—can amount to a research essay. There are also variations of the IMRAD report where interpretation and argumentation take center stage, though the introductory and discussion sections continue to honor the basic functions we've outlined here.

Because research writing is diverse, no single genre can account for the myriad variations you may encounter—whether as a reader or as a writer. There are a few features, however, that distinguish research reports from other genres. Research reports almost always include a references list, or a list of works cited. **References lists** (see Chapter 3, bibliographic phase) provide readers with a comprehensive listing of all sources mentioned in the report. The list makes an ethical gesture—both of giving credit where it is due and of providing readers with a good faith guide they can follow for tracing and finding any source they wish to inquire into more deeply. In some fields, it is also common for research

reports to include **footnotes** or **endnotes**—relevant, detailed asides that deepen and contextualize some added dimension of the text. **Appendices** are another common feature of research reports. They are used for including more than the report itself can reasonably incorporate within a specified scope. An appendix is a companion document supplied by the research writer to provide access to a readily available reference, such as reference to a raw data set (e.g., the full script of an interview or supplemental photographs).

■ Short Form Presentations

Much like practice with writing, practice with presentations frequently leads to greater fluency, proficiency, and effectiveness. Presenting helps you hone your own sense of what is appropriate in any given situation and makes you more aware of choices related to timing, the use of media, and audience interaction. Presentations are a rhetorical form for circulating research—whether that research is in its planning stages, well underway, or completed—because they are tailored for a particular audience in a particular place and time.

Try This: Exploring Manuscript Guidelines (45 minutes)

Publishing venues commonly stipulate the forms of research reports they accept. Many predefine a scope, a style system (e.g., MLA, APA, Chicago, etc.), and a stance on the use of footnotes and appendices. Identify one to three publication venues you think might be receptive to publishing research writing like yours. You might start with some of the journals that you came across in your source-work (Chapter 3) or that you have found in your research in the past. Locate the manuscript guidelines for these journals. Which qualities of the document are strictly prescribed? Which appear to you to be less clearly defined? For each publication venue, make a two-column list, with one column identifying strict guidelines and the other identifying features or qualities more loosely determined or not mentioned at all.

Try This, *Too*: Local Publication Venues (30 minutes)

Does your university have a publication venue for the research writing done by undergraduate students? First-year students? Students nearing graduation? Graduate students? Identify these publication venues. How often does this publication come out? What sort of writing is published in it?

Since the early 2000s, short form presentations have caught on in a wide range of fields, from engineering and computer science to rhetoric and design. Short form presentations are sometimes called pitches. Perhaps the best-known type of pitch is the **elevator pitch**,* named for its duration approximating the time it takes to tell someone on an elevator about something you are doing, selling, or working on. Even the longest elevator ride is only a few minutes. Elevator pitches, then, are purposefully bound at only a few minutes. Presenters delivering elevator pitches have a short timeframe to get to the point, deliver a key premise or two, or pose a couple of questions, perhaps; ultimately, they must keep it short and sweet.

Several other short form presentations have gained notoriety in recent years. The **PechaKucha** presentation, a model devised by engineers who were impatient with needlessly drawn out presentations, is usually made up of 20 slides, each set to automatically rotate after 20 seconds. This makes for a 6 minute, 40 second presentation. **Ignite presentations** work similarly; these are five minute presentations with automatically advancing slides. Twenty slides advance after 15 seconds each, making for a five minute pitch. And the **Three Minute Thesis** presentation, popularized first at Queensland University in Australia, comes in at strictly three minutes using one slide.

Whatever the specifications for a short form presentation, we urge an awareness of the rhetorical considerations consistent with other forms of communication—audience, purpose, timing, and context. Effective short form presentations focus only on one or two major ideas; they are spare in that they are long enough to offer only a provocation or provide only a slice of a research study, which then stages the possibility of more expansive discussion.

We want to highlight a few additional considerations as you undertake a short form presentation yourself in order to highlight the idea that research can be shared or circulated at *any moment in its development:*

1. **Slide decks for digitally-enhanced presentations are composed.**
   They are written, assembled, arranged, and configured with regard to specific audiences and purposes. Because slide decks are written, they should be developed with rhetorical consideration and care that reflects the choices of the presenter and an awareness of audience. This means paying close attention to the number of words, to the spare and

When preparing and delivering an elevator pitch, or a short form presentation, rhetorical considerations of audience, purpose, timing, and context are paramount.

purposeful use of images that give appropriate credit to sources, and to the choices that go into typeface, spacing, and color coordination. None of these features should be shrugged off as unimportant, for the slide deck carries with it the ethos of the presenter.

2. **The presentation itself is only a part of the purpose.** It's true that the presenter delivers information, sharing details about the research process and findings, but the presenter is also responsible for setting the tone for the kind of conversation they want to have after the presentation. Presenters should encourage questions and answers, perhaps by including a slide at the end that invites questions, whether general or specific.

Try This: What Makes an Effective Short Form Presentation? (30 minutes)

Look into the short form presentations listed here: PechaKucha, Ignite, and Three Minute Thesis (3MT). See if you can find online one presentation adhering to one of these formats that you consider to be effective for any of the following reasons:

- the clarity of its main point or central idea
- its use of typeface and spacing
- its use of color and images
- the relationship between the language of the speaker and the language on the slides
- the question or questions posed in the presentation

Identify one of these qualities and describe why you think the presentation is rhetorically effective on this basis.

Try This, Too: Presenting Visuals (45 minutes)

As you consider possibilities for focusing and developing your own short form presentation, return to Chapter 7: Working with Visuals. Which visuals do you think would align well with your presentation? Why? Identify up to three visuals and write rationale statements for why they would make a worthwhile addition to the short form presentation you are developing. If you choose photographs, what are some advantages in taking or choosing to work with your own photographs rather than locating and incorporating images you find online?

3. **Short form presentations can be integrated and coordinated for what are sometimes called group presentations.** When teams of researchers collaborate on a research project, group presentations can be an opportunity for them to share information about their roles and the intricacies of their work insofar as they shaped the study and conducted dimensions of the research. Short form presentations also work well for coordinated panels and roundtables, leaving sufficient time in classes or conferences featuring such presentations for conversation and discussion.

■ Research Posters

Research posters are yet another common rhetorical form used for delivering and circulating research. Research posters can put on display central claims and assertions, questions or lines of inquiry, and provisional findings and snapshots or slices of data. They might pick and choose among data presented in words or presented visually, such as in graphs, charts, tables, and infographics (see Chapter 7). They may even re-format IMRAD report findings visually. Posters reflect design choices that impact typeface and size, spacing and positioning, figures and captions, and references.

In some disciplines, posters reflect a widely shared grammar, or pattern. This means that a sample of posters will reflect similar features. In other disciplines, however, design choices reflect greater variety, and, as such, no two posters adhere to the same formula. Research posters can be designed for a great range of shapes and sizes, from minimalist formats, like 11x17-inch flyers, which don't allow for much content, to 48x36-inch posters, which can feature greater numbers of images and higher word counts. It is hard to generalize about all posters. Some research posters, for example, have been remediated for digital environments, which means there are so-called digital posters in circulation that blur distinctions between large PDF documents, web sites, and slide decks.

Many posters are put on display during what are called **poster sessions**, or scheduled events during which presenters stand or sit nearby the poster while attendees browse as if making their way through a gallery. One advantage of this model is that the researcher who created the poster is nearby for talking conversationally about the research. But this real-time interaction also means that

posters should be designed thoughtfully with regard to legibility (large text and understandable images). Posters browsed in a gallery setting should also be direct about questions or provocations, even highlighting the takeaway for those who are interested in learning about the study, its status, and its prospective insights.

■ Expanding Forms

In addition to research reports, short form presentations, and research posters, many other rhetorical forms have extended the reach and circulation of research beyond classrooms and campuses. Some universities host research fairs where researchers share their work using mixed forms—websites, podcasts, dioramas, brochures, pamphlets, short documentary videos, handouts, games, and zines. Working across these rhetorical forms is called **multimodal transformation**, for it recognizes and takes seriously (and sometimes playfully, too) the principles that research should circulate widely and also that the widest possible circulation benefits from recompositions between one form and another. Making good use of a wide array of choices for presenting research, both in-process and finished, can help researchers discover new audiences and connect with prospective stakeholders and can also generate **rhetorical velocity** for researchers as others reformulate their findings as well.

Focus on Delivery: Developing a Research Poster

Research posters* involve considerations of timing, audience, and purpose. How much time do you have to develop the poster and for how long will it be on display? Who is likely to see the poster, to ask questions about it, to engage with it while you, as its maker, are or are not present? What goals do you have for the poster? Do you want it to provide an update, to pose questions, to share results and analysis, or to pose possibilities for future, related research? These generative lead-ins should help you begin to sketch out a plan for the poster, which can then shift to secondary considerations that are more practical and applied, related to size and materials.

When developing a research poster, what do you want the audience to see? To remember? To ask about? To learn?

In terms of sizes and materials, a crucial consideration from the outset is whether you will design the poster to be printed as an entire work or whether, instead, you will work with smaller pieces (e.g., standard sheets of paper cut and pasted or taped into place). For printed posters, PowerPoint, Google Slides, or other slideware can provide you with a canvas, which you can size to the desired specifications and output as a PDF. When working with one of these programs, we recommend beginning with a white background and black text, as these defaults match best with standard paper colors and high contrast printing results.

Before you commit to creating a poster digitally to later save it as a PDF for printing, look into printing options on your campus or nearby. What printing options are there? What will it cost to print the poster? What else will you need to have on hand to assure that it stands upright during the poster presentation? Will you need tape or tacks? Will there be an easel? These seemingly rudimentary details about displaying a research poster are the responsibility of the presenter putting it on display. Neglecting to attend to these important, practical details can lead to surprising costs, or, even worse, the unfortunate situation of not being able to display your poster on the day of the session.

Standard poster boards are 22x28 inches or 24x36 inches, while medium display tri-folds are 36x48 inches. Because these sizes are variable, the first time you create a poster, it may be best to work with smaller elements that you attach to the board. This strategy gives you options for focusing on specific elements if you decide you need to make an adjustment once you display the poster.

At a minimum, a research poster should include

- a prominent title
- the researcher's name and contact information (email address, at a minimum)
- a handout or a link to references

Other options for content on a research poster include

- a statement about the purpose for the research, including the design of the study and provisional findings
- up to two specific assertions, insights, or discoveries realized through analysis

- up to two specific limitations, constraints, or shortcomings encountered while undertaking the study
- up to two questions or prospective possibilities for further research, including next steps
- at least one visual element, such as a photograph, graph or chart, table, or infographic (see Chapter 7)

As you develop your poster, remember that those who read it will almost always be viewing it from a distance of three to five feet, so larger typefaces (e.g., 24 point) and high contrast color choices (e.g., no yellows, pinks, or light blues) will give your poster the best chance of communicating effectively to the audience.

■ Works Cited

Ridolfo, Jim, and Dànielle Nicole DeVoss. "Composing for Recomposition: Rhetorical Velocity and Delivery." *Kairos: A Journal of Rhetoric, Technology, and Pedagogy,* vol. 13, no. 2, 2009, kairos.technorhetoric.net/13.2/topoi/ridolfo_devoss/index.html.

Try This: Creating a Research Methods Glossary (1 hour or more)

Throughout this book, we have boldfaced several keywords and phrases we consider significant for gaining practice with research methods. In some cases, the boldfaced words are accompanied by an in-text definition. In other cases, the keyword or phrase is boldfaced but the definition is implied within a section or chapter's broader context. And in yet other cases, the term may warrant more careful searching--defining keywords as an act of research. Rather than provide a fixed glossary, we offer this final Try This as an invitation to develop your own research methods glossary. You might build the glossary and compile its definitions working only with the boldfaced terms, or you might explore beyond the bounds of this book to introduce other relevant vocabulary. You might build the glossary individually, as part of a working group, or as a class. And you might build the glossary quickly or over many weeks or months, returning to established terms and definitions to fine tune them based on your experience with research writing and informed by all you are learning. We invite you to try this, in this way, because we consider writing a glossary to be an act of composing that is generative and that is well matched with the most rewarding possible engagements with research writing.