

## CHAPTER 1

# Epistemologies of Collaboration

This introductory chapter addresses the following questions: Why this book? Why collaborations, and why now? What are the specific purposes and aims of the book? What is collaboration? How is collaboration distinct from cooperation? What are the various ways of knowing, being, and doing related to collaboration? How do small-group versus large-group dynamics affect a collaborative research project? How do researchers decide whether collaborative projects are right for them? Do you want to be a collaborative researcher? Do you want to teach others how to engage in collaborative research?

*Collaboration* is a term that has been used often in recent years among researchers and about research. With an increasing pressure from funders expecting a variety of disciplines or community partners to come together to solve complex problems in society through collaborative research, a renewed effort to describe and explain the goals, processes, and outcomes of collaborative research is upon us. Although researchers are enthusiastic and willing to engage in joint projects, often the learning about collaboration is erratic and occurs on the job, leaving a sense of underpreparedness for the enterprise. Collaboration is almost universally acknowledged as positive, yet the difficulties of collaboration become evident immediately with the realization that there is a lack of a shared understanding regarding what the term means and how it operates. Collaboration is known by several names, making it difficult for novice researchers to figure out what exactly it entails. The diversity of terms used for collaborative practice include, for example, *partnership*, *joint venture*, *team*, and *pooling resources*. In the field of qualitative research, collaboration between researchers and participants and co-researching among researchers, as well as participatory action research, all have degrees of collaboration built into them. It is our aim in this book to examine these and other forms of collaboration to offer

up an in-depth view of the range of possibilities of collaborative research projects, as well as to bring together significant sections of the literature on collaboration in research.

Our deep interest and passion for this topic arises from our own 30-plus years of conducting, teaching, and writing about collaborative qualitative research. Further, we have, since our days as graduate students, been collaborating on research projects and have witnessed and experienced firsthand some of the typical challenges and benefits of collaboration. Alongside our experiences, we have drawn on the literature from the social sciences, group dynamics theories, and theories of diffraction, as well as experiential accounts of collaborations in qualitative research found in journals and books from a range of disciplines. We also examined published qualitative research studies from different social science and allied health-related fields. We examined a variety of qualitative inquiry collaborations and analyzed those exemplars. In this book, we synthesize our experiences with the literature and offer both a knowledge base regarding the range of collaborative research being undertaken and a foundation for future practice aimed at the question, “What skills or knowledge is needed to conduct meaningful collaborative research?”

In the last decade, qualitative research has expanded to include a vast array of approaches and methods. Researchers have been engaged in a vigorous debate and discussion about issues of social justice and power. Many scholars have reiterated the effects of power dynamics in all stages of research—question posing, site selection and understanding contexts, who is cited as authoritative within a literature review, forms of reflexivity, and the deployment of various methods of data collection and analysis. In this book, we argue for the benefits of various forms of collaboration and suggest ways collaboration can increase critical approaches to knowledge creation.

The promise is that collaboration can yield rich insights, as well as bring about greater equity in the dynamics between researchers and those who are researched. Studies of researcher engagement with participatory methods have emphasized innovative methodologies, and findings from such studies have woven the narratives of participants with those of the researcher. Collaborative research has been discussed notably within forms of action research and within affiliated writing practices. For example, researchers have noted the need for a “collaborative turn” (Gershon, 2009) in research approaches and described accounts of collective writing as activism (Gale & Wyatt, 2019a, 2019b; Diversi, Gale, Moreira, & Wyatt, 2021), and Indigenous research as decolonizing research (Smith, 2021). Further, some scholars have discussed their experiences with an increased emphasis on intraprofessional and interprofessional practices within allied health care fields (Moore et al., 2019) and the ethics of care within participatory

health research (Groot et al., 2019). Also, a growing number of researchers, including feminist geographers, are focusing on what cross-cultural collaborations (Pratt, 2010; Benson & Nagar, 2006) may mean for new types of interdisciplinary or transdisciplinary research. It is increasingly evident that partnerships across disciplines, across epistemological orientations, and with communities toward whom research is directed are all significant and crucial to the next generation of qualitative researchers.

In a globalized, interdependent world, we see that researchers need not only the skills and a wide array of methodological tools for qualitative inquiry but also the ability to collaborate and work together across cultures and nations. For example, research into issues of immigration or urbanization of land affects several cultures and populations, thereby challenging researchers to move away from the image of the lone researcher. In addition, the different hats worn by researchers (e.g., colleague, friend, listener, activist, catalyst, evaluator) also indicate relational ties to people around them and involve some type of intentional and ethical collaborative practice. However, despite the repeated urging toward the development of inclusive methods, evident within the discourses and practices surrounding participatory action research or collaborative autoethnography, we try to present here some rich conversations about the varieties of collaboration that are possible within these (and other) approaches. It is our hope that, with renewed attention to various forms of collaboration, qualitative researchers may develop more nuanced understandings and more creative solutions to the questions they are posing.

Qualitative research, by and large, still remains largely an individual enterprise in part influenced by academic programs that prize individual dissertations and by academic institutions that often reward sole authorship over author collaborations. The imperative in qualitative research to move away from this individualistic idea of a lone qualitative researcher toward collaboration is strong and increasingly important for deepening knowledge in a globalized, interdependent world. Further, although collaborations are understood to hold positive promise, the collaborative enterprise in qualitative research has not been sufficiently explored or discussed in depth. Despite the emphasis on collaboration as a valued research practice, it is taken for granted that researchers know what collaboration is, and therefore the topic is rarely discussed in qualitative research methods courses or books. How should researchers go about developing a set of epistemologies, skills, and tools for the development of new knowledge, using collaboration? Qualitative researchers may want to collaborate, both with participants and with researchers, to create a community of practice, yet they may struggle to know how to do it effectively. For example, communities of practice (CoP) represent one model for advancing a shared set of insights and practices that are understood to be always evolving as

practitioners engage with one another. This is a concept that we take up in Chapter 6 in the context of collaborative research. Although there is no dearth of mentions of collaboration in the qualitative research literature, there is very little that explains how to go about such collaborations. Collaboration, methodologically, is often taken for granted or insufficiently explored as a concept or practice.

Besides, *collaboration* is often used as a catchall word to indicate any type of organizational or personal relations in which more than one organization or person is involved. In other words, any collective action or interpersonal or interorganizational setup is named a collaboration, making it difficult for people to understand and implement collaborative practice. It is important to understand and question strategic alliances and collective actions and group interactions to see what constitutes collaboration and to pay attention to the structures and procedures in place for healthy outcomes of such partnerships. Further, there is a lack of emphasis on the pros and cons of collaborative research practices, of advice about how to evaluate a project to determine whether collaborative practices would be beneficial, and of specific tools to assist early-career researchers, in particular, in learning what it means to conceptualize and carry out collaborative research. With this book, we have tried to bring together the research literature on collaborative practices and to discuss the issues with collaboration, while also offering concrete suggestions regarding how to engage in collaborative practice and create a CoP. In so doing, we offer suggestions for the pedagogical implications of emphasizing collaborative research practices for early-career researchers and graduate students.

We bring together and synthesize the different accounts of collaborative research, positive and negative, in the qualitative research literature. Second, we discuss and explain, across chapters, different types of collaborations within qualitative research traditions—for example, duoethnography, collective biography, participatory action research, photovoice, collective writing groups, study circles, performance ethnography, and cross-cultural research. Third, we offer practical tips covering the arc of collaborative practices in research, from conceptualizing research to writing up or presenting the findings. Fourth, we hope to advance the discussion about ethical considerations related to collaborative qualitative research. We have attempted to take discussions of ethics regarding collaboration further by posing questions such as the following: Who owns the research? Who decides what aspects of the findings shall be disseminated? How should participant confidentiality be attended to? What about authorship ordering? and so forth. Each of these areas requires attention and involves issues of clear communication, consensus building, agreements, negotiations, trust, responsibility, and reciprocity.

It is important to explore the various ways in which people understand collaboration and the range of epistemologies that guide those

understandings in order to harness the transformational opportunities that research collaborations can bring to solving societal problems. In most of the epistemologies we have selected for examination, collaboration is a high art, and one that requires incremental skill building, exposure to highly diverse working teams, multiple opportunities to experiment with appropriate scaffolding to assist researchers, and systemic efforts to scale up the synergy found in high-performing collaborations.

## **How Is Collaboration Different from Cooperation?**

Panitz (1999) has contributed significantly to helping scholars understand the important distinctions between collaboration and cooperation, two related but different approaches. We describe these concepts and related practices and then extrapolate the meaning to apply it to preparing researchers for collaborative research projects. Panitz (1999) presents an overview of the two concepts and points out that, in the realm of teaching and learning, cooperative learning and collaborative learning are often mistaken for each other. To the untrained eye, they may look alike. Cooperative learning occurs when a group of people enter into a learning environment with an agreed-upon goal and are assigned or negotiate preformed or predetermined tasks that help the group accomplish the goal. Collaborative learning likewise involves a team of learners, yet the degree of predetermination is lessened or eliminated, and the collaborators must engage in defining the problem or critical question to be explored and grapple together with the processes that will guide the inquiry.

Panitz (1999) offers the following principles as hallmarks of collaborative learning:

1. Working together results in a greater understanding than would likely have occurred if one had worked independently.
2. Spoken and written interactions contribute to this increased understanding.
3. Opportunity exists to become aware, through classroom experiences, of relationships between social interactions and increased understanding.
4. Some elements of this increased understanding are idiosyncratic and unpredictable.
5. Participation is voluntary and must be freely entered into. (p. 12)

Panitz and Panitz (1998) concluded that collaborative learning (CL) is a philosophy as well as a learning strategy focused on the ways of including and engaging “individual group members’ abilities and contributions. The underlying premise of CL is based upon consensus building . . . in contrast to competition . . . [and] CL practitioners apply this philosophy in the

classroom, at committee meetings, with community groups and generally as a way of living with and dealing with other people” (p. 161).

Panitz and Panitz (1998) developed a host of reasons why people resist collaboration that parallel what we believe to be reasons why researchers resist. Researchers often report finding collaboration a complicated state of being to create and/or sustain. In Table 1.1, we have applied the types of resistance identified by Panitz and Panitz in a teaching and learning domain to the dilemmas often encountered by novice researchers learning to engage in new epistemologies of collaboration.

Others have contributed to understanding the complexities of collaborative work. Denning and Yaholkovsky (2008), for example, understand working together as having four main levels that are on a continuum with increasing levels of complexity: information sharing, coordination, cooperation, and collaboration. They claim that collaboration “is an ideal achieved far less often than it is invoked. It is often confused with information sharing, cooperation, or coordination” (Denning & Yaholkovsky, 2008, p. 23). They describe coordination as a process of “regulating interactions so that a system of people and objects fulfills its goals” (p. 20) and cooperation as “playing in the same game with others according to a set of behavior rules” (p. 20).

Denning and Yaholkovsky (2008) further argue that collaboration requires solidarity and a sense of being on the same side. They explain that problem solving at times pits two groups of advocates against each other as each group fights for particular causes that may be in conflict with the other group. They refer to some of these conflicts as the “blue” versus “green” space. The desire to protect the environment, or the green movement, may come up against an imperative to create infrastructure for security and defense, or the blue movement. A larger perspective that is inclusive of both spaces requires collaborations that might need deliberate processes.

Technology can assist in collaborative processes but cannot bring about a sense of cooperation. For that to occur, one needs to have a shared purpose and mutual goals. Northway, Parker, and Roberts (2001) explained that collaboration is not an automatic or even a first response to problem solving. When faced with a particularly complex problem, people are likely to want to shift the responsibility to a higher authority or vote on the best argument rather than try to come together to resolve issues in ways that can meet all the needs of different stakeholder groups. Northway et al. (2001) contend that only when other solutions fail do people tend to move toward collaboration. Collaboration has several challenges that are rooted in what people tend to believe. If people believe that winning means stating one’s position more authoritatively or refusing to budge, the idea of collaboration would be a nonstarter. Denning and Yaholkovsky (2008) also point out that seeking any single person to praise for group success can defeat the purpose of coming together as a successful group.

**TABLE 1.1. Resistance to Collaboration**

<b>Types of resistance (Panitz &amp; Panitz, 1998)</b>	<b>Description (Panitz &amp; Panitz, 1998)</b>	<b>How it applies to research collaborations (Mulvihill &amp; Swaminathan)</b>
Loss of control	"Collaborative learning techniques encourage students to formulate their own constructs and ways of understanding the material. The constructivist ideology is foreign to most teachers who have been trained in the didactic method of lecturing" (p. 163).	Locus-of-control issues are central to this type of resistance when researchers are trying to situate themselves within the team of collaborators. Coming to terms with the implications of aligning with a constructivist epistemology that values and is dependent upon collaborative knowledge generation is a complex set of challenges to individual agency for some researchers.
Lack of self-confidence	"CL redefines the role of teacher from expert to facilitator. The focus on the student reduces the opportunities teachers have to demonstrate their expertise and might call into question their teaching ability" (p. 164).	Researchers often recognize a sharp lack of self-confidence in the beginning stages of a collaborative project for several reasons, including the state of ambiguity they find themselves experiencing as roles are being negotiated. Learning to decenter one's expertise is part of the experience of moving into a state of collaboration.
Fear of the loss of time and content coverage	"Teachers fear a loss in content when they use CL methods because group interactions often take longer than simple lectures" (p. 164). "Initially groups do work slowly as they learn how to function cooperatively, analyze what works and what doesn't work for their groups, and receive training in conflict resolution" (p. 164).	Researchers can grow impatient when they start experiencing the temporal conditions of an active collaboration in which some steps take longer amounts of time and need patience in order to be nurtured. Minor and not-so-minor conflicts can erupt. Learning to harness the conflicts for further development of the team and as opportunities to clarify direction for the research project is part of the way researchers combat the fear of lost time and focus on the narrower aspects of the collaborative research project.
Lack of prepared materials	"Educators often need to create new or significantly modify previously developed plans or materials to better align with collaborative principles of learning" (p. 165).	Researchers engaged in collaborative research projects may need to devise project-related materials and processes to collect and analyze data in new and different ways.
Teachers' egos	"Many teachers are wrapped up in their own self-importance and enjoy being the center of attention" (p. 165). "They think they must tell them what to learn and provide all the structure for the learning to take place. The egotistical side of teaching must be overcome in order for teachers to involve their students actively in the learning process" (p. 165).	Researchers' egos (i.e., sense of self) are recast under a collaborative paradigm, and sometimes this can be an area of resistance for researchers.

(continued)



TABLE 1.1. (continued)

Types of resistance (Panitz & Panitz, 1998)	Description (Panitz & Panitz, 1998)	How it applies to research collaborations (Mulvihill & Swaminathan)
Lack of familiarity with alternative assessment techniques	"They presume that individual accountability will be lost or that one student will dominate the group or do all the work for the group. They are unfamiliar with how to assess group efforts and assign grades to groups. Often they assume that only one process is appropriate for assessing student performance" (p. 171).	Researchers can remain skeptical about a shared work culture. Will all members of the team contribute equally? And will power imbalances emerge in ways that become counterproductive to the goals of the project? How will feedback processes related to how the group is functioning be received? Will feedback effectively help teams correct course if needed?
Concern with teacher evaluation and personal advancement	"In order for teachers to be properly evaluated the supervisor must understand the nature of this method and accept it as a teaching paradigm" (p. 166). "To someone who is untrained in CL these activities may appear to represent ineffective teaching, which in turn may lead to a poor classroom evaluation" (p. 166).	Researchers may come face to face with new realities about evaluation when their evaluators are not as familiar with the tenets of collaborative research.
Students' resistance to collaborative learning	"CL encourages student input on methodology. Not surprisingly, some of this feedback may be critical. Student criticism may be new to many teachers" (p. 167). "Students feel that the lecture method is 'easier' because they are passive during the class while apparently receiving the necessary information. In contrast, interactive classes are very intense. The responsibility for learning is shifted to the student, thus raising the level of critical thinking by each student. This situation is both mentally and physically tiring" (p. 167). "For a new CL practitioner this can be very disconcerting. To the more experienced teacher, this is just part of the process all groups go through as they learn how to use CL techniques, and begin to see and appreciate its benefits as they move away from the comfortable paradigm of the lecture method" (p. 167).	Researchers may find themselves resisting the responsibilities inherent within collaborative projects that require an adherence to practices that involve a wider range of perspectives. Community partners who are new to the role of co-researcher, for example, may slip back into passive behaviors when they feel the weight of the project and they experience the fatigue or discomfort inherent in knowledge production.

(continued)



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Types of resistance (Panitz & Panitz, 1998)	Description (Panitz & Panitz, 1998)	How it applies to research collaborations (Mulvihill & Swaminathan)
Lack of familiarity with collaborative learning	<p>“When adopting CL the teacher needs to learn the new techniques, practice them, introduce them into the classroom and work with the students to practice the new methods. Also, it is often necessary to convince the students of the benefits of working together. The fact that the responsibility for learning is being shifted to the students is hard for some students to adjust to” (p. 170).</p> <p>“CL involves trial and error approaches. Not every activity works exactly as planned and constant modification is needed. Some activities work better with some groups than with others and classes react differently to each situation” (p. 170).</p>	<p>Researchers venturing into collaborative research projects for the first time may experience a steep learning curve, including learning new approaches to every aspect of designing and implementing research designs. Academic researchers have often been socialized to work independently (and sometimes competitively) in their efforts to create new knowledge. They are used to working at their own pace and being (relatively) sole decision makers about most aspects of their research.</p>
Lack of training in collaborative methods	<p>“The current teacher training methodology does not foster CL. Teachers are not trained to facilitate groups, use brainstorming techniques, facilitate conflict management, or use group dynamics theory” (p. 169).</p> <p>“Therefore, teachers need to be well grounded in the philosophy of CL and they must have opportunities to practice in a safe environment” (p. 169).</p>	<p>Due to a lack of comprehensive, intentional, and sustained training for novice researchers, collaborative research projects may be stalled due to inexperienced researchers left without much methodological support as they attempt to be in collaboration.</p>

Morse (2008) marked a shift among some qualitative researchers engaged in large-group projects. She offered the following categories for team-based collaborations. The first category she mentions is *cohesive*, or when most researchers on a team read the interview data and all researchers offer analytic domains or codes and themes. The second category is what she refers to as *split the domain* (p. 3). In this, the topic is divided up into smaller parts, and researchers take up the part apportioned to them. It can be split by gender or categories within the topic, which can in turn allow for greater depth of analysis. The third category is *providing summaries* (p. 4). In this, a researcher would share the essence of the experiences of participant interviews conducted. The fourth category is *skill-level assignment* (p. 4), which, as Morse (2008) suggests, is problematic. This would mean that some researchers would be assigned to coding or analysis, whereas others might be interviewers. This type of parsing out the different roles and tasks in collaborative exercise may have an adverse effect on the quality of the collaboration. The fifth type of collaboration described by Morse (2008) is *convenience*, which means that the researcher may

conduct interviews and code some data while leaving the rest of the work to be done by research assistants. The sixth and final type of collaboration does not have a name, and Morse simply uses quotes with a blank space to indicate this type. She points out that in this type of collaboration, the researchers might hand over the data gathering and analysis processes to assistants or contract out the coding and analysis.

Because collaborative research projects can be descriptive or interpretive, it is important for qualitative researchers to keep in mind the multiple ways in which teamwork might hinder rather than facilitate collaborative research. Morse's (2008) categories remind us that the lone-researcher paradigm is strong and difficult to move out of. Further, collaborative qualitative research needs careful planning and evaluation at every step to be able to benefit participants and researchers.

Rice and McCool (2021) developed a framework for analyzing successful collaborations and provide another useful typology for consideration. The four types are:

**Autonomous/Inclusive:** This type of collaborative body has general control over its membership, operational procedures, and the end result and strives to include as many stakeholders as possible.

**Autonomous/Exclusive:** This type of collaborative body has general control over its membership, operational procedures, and the end result, but limits access to the collaborative process to only certain parties, to the exclusion of others.

**Dependent/Inclusive:** This type of collaborative body has limited control over its membership, operational procedures, and the end result, but strives to include all possible stakeholders.

**Dependent/Exclusive:** This type of collaborative body has limited control over its membership, operational procedures, and the end result, and membership is limited to only certain stakeholders. (pp. 19–20)

Perhaps not surprising, Rice and McCool (2021) found that greater levels of autonomy and inclusivity led to higher probabilities of successful collaboration when “success” is defined as “meeting the goal or mission for which the collaborative body was established with the approval of a wide variety of affected stakeholders” (p. 20).

Others, such as Penuel and colleagues (2020), argued that collaborative approaches to research may result in research outcomes that are deemed more relevant to educational problems and may develop more potent partnerships for ongoing and continuous actions related to research-informed decision making. They explored four approaches to collaboration involving educational research, namely: community-based design research, design-based implementation research, improvement science in networked improvement communities, and the strategic education research partnership.

Rinehart and Earl (2016) advocate for collaborative research and argue that in an era of “audit culture” that dominates the epistemological landscape, it is more important than ever to promote collaborative research. They point out that the contemporary neoliberal prominence that has given rise to an audit culture, in which strict accountability lends itself to all aspects of research, can present a threatening backlash to collaborative research, a threat that one needs to counter. They explain that *audit culture* is a term derived from finance and is inappropriate for research, as it seeks a continuous self-measurement against external benchmarks. Further, they argue that such a culture narrows down the scope of research questions.

Transdisciplinary collaboration, according to Stokols, Misra, Moser, Hall, and Taylor (2008), “includes *intra-organizational partnerships* in which participants work together within a single organization; *inter-organizational alliances* whose participants span multiple organizations; and *intersectoral partnerships* in which members representing multiple communities, regions, or nations form alliances to develop programs or policies covering larger geographic and political domains” (p. S99; emphasis in original). The scope of the transdisciplinary collaboration matters, and this team of authors developed a typology of contextual factors influencing the exploration of transdisciplinary scientific collaboration.

Collectively, these typologies point to the underlying epistemologies at work when researchers are contemplating the forms and functions of collaboration and how it operates as a construct within the process of conducting qualitative inquiry.

### **Boyer’s Model: Ways of Knowing and Being**

Another productive way of thinking about the various epistemologies of collaboration is to make use of Boyer’s model (1990). Boyer expanded the discourse about the concept of scholarship and offered a new set of inroads for those interested in a similar expansion of the concept of collaboration. Boyer’s model looks at the ways in which qualitative researchers can reconceptualize and expand notions of research collaboration to further animate and accelerate the creation of new knowledge and deepen the understanding of the human condition to elevate the ability to empathize and strive toward greater levels of social justice.

The Boyer model introduced a new nomenclature to help broaden and differentiate between four types of scholarship: the scholarship of discovery, the scholarship of integration, the scholarship of application, and the scholarship of teaching. Applying Boyer’s model to help broaden and deepen researchers’ understandings of collaborative research provides a

new way of merging scholarship domains with related skill acquisition for emerging researchers.

Whereas the **scholarship of discovery** is focused on deriving new knowledge from empirical data and is most related to traditional ways of thinking about research, collaborative research enterprises aimed at discovery necessarily need to ask new questions at the outset of the research design. How will collaboration enhance and improve the quality of the project, as well as the range of possible implications for the newly generated knowledge?

Whereas the **scholarship of integration** is focused on making connections between various types of knowledge and relies on well-informed interpretations of existing knowledge that leads to new understandings and resulting actions, collaborations will infuse the interpretation–reinterpretation process with more complex outcomes and reduce the silo effect that is often the Achilles’ heel to any research project hoping to instigate meaningful change.

Whereas the **scholarship of application** emphasizes how knowledge can be best applied in new ways and is often scenario- and/or case-study based, involving a network of engaged researchers and practitioners embedded within a particular context, collaborative scholarship will help expand the ways research outcomes can be applied and used by those in need of the new knowledge.

Whereas the **scholarship of teaching** is an approach to systematically studying learning processes in order to improve learning for the benefit of learners, as well as to accelerate and improve the connection between learning and affecting positive outcomes derived from the knowledge generated, collaborative cross-context projects ought to catalyze researchers’ ability to ready groups of learners for new approaches based on research findings.

*Exemplars* are components in each chapter that provide readers with published research exemplifying the concepts and ideas being discussed.

### EXEMPLAR 1.1. A Framework for Analyzing Research Collaboration

**Citation:** Bozeman, B., & Boardman, C. (2014) Assessing research collaboration studies: A framework for analysis. In *Research collaboration and team science* (pp. 1–11). Cham, Switzerland: Springer.

**Summary:** The authors estimated that 90% of STEM-related research studies and publications (in 2014) were collaborative, and they claimed that this reality marked a “collaboration imperative” within the research community. Further, they claimed that team-based collaborative research yielded high-impact results, as well as patents, signifying an increase in commercial uses of research.

**This is a good example of the how epistemologies of collaboration influence the research community because:**

1. It offers a compelling argument for the important shifts under way in the research community.
2. The authors provide a framework for analysis that can be applied across research types.

*Pedagogical Pathways* are components in each chapter that focus on reflection exercises and pedagogical prompts providing approaches for deepening skills and understandings. Pedagogical Pathway 1.1 provides a self-assessment tool for early-career researchers to help them build a baseline profile and aspirational goals related to collaborative research.

### **PEDAGOGICAL PATHWAY 1.1. Researcher Self-Assessment**

#### **GOAL**

To conduct a researcher self-assessment regarding activities and dispositions needed to engage in collaborative research.

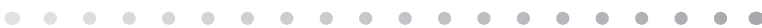
#### **GUIDELINES**

Read the following article published by a team of research collaborators in the sciences and specifically contemplate how they define collaboration and the advice they share for ways to establish collaborations:

Glover, N. M., Antoniadis, I., George, G. M., Götzenberger, L., Gutzat, R., Koorem, K., et al. (2016). A pragmatic approach to getting published: 35 tips for early career researchers. *Frontiers in Plant Science*, 7, 610. Available at [www.frontiersin.org/articles/10.3389/fpls.2016.00610/full](http://www.frontiersin.org/articles/10.3389/fpls.2016.00610/full)

#### **REFLECT**

Rank-order the 35 tips the article offers, with #1 being the area in which you have the most confidence/most experience and #35 being the area in which you have the least confidence/least experience.



In this chapter, we have opened up possibilities for collaborative research, have discussed whom the book is for, and laid out some key

features in the book, including Pedagogical Pathways and Exemplars. Additionally, we have given a glimpse of what follows in the chapters and have introduced the ways in which braiding of research studies with application-oriented pedagogical pathways can help researchers practice or try out collaborative research activities. With this chapter, we invite scholars, researchers, and the community into collaborative research spaces in service of building a more socially just and equitable society. Chapter 2 begins with collaborative ecologies and building research teams, as well as anticipating and overcoming attendant challenges. Chapter 3 builds on Chapter 2 to offer ways in which collaborations work across the arc of research projects, including formulating research topics and questions, data gathering, and analysis processes. Chapter 4 comprises a range of methodologies and methods of qualitative research within collaborations and explains how they can be approached. The spectrum of approaches, methodologies, and methods covers a wide range, including different types of ethnographic research and biographical research and asset-based or appreciative inquiry, phenomenology, focus groups, and narratives. Chapter 5 tackles participatory action research (PAR), a popular form of collaborative research, and examines different forms of PAR within a variety of contexts to offer researchers options for collaboration within PAR. Chapter 6 builds on PAR and introduces and explains collaborative encounters that are focused on learning and building community—specifically, learning circles, study circles, and communities of practice. Chapter 7 moves to arts-based research by examining photographic collaborations—including documentaries, photographic collages, photovoice, photo-elicitation projects, and digital storytelling. Chapter 8 focuses on how researchers can use performance collaborations to further qualitative research in ways that reach and empower marginalized and vulnerable populations. Chapter 9 acknowledges that, while collaborative research is on the rise with multidisciplinary and international collaborations under way, it is important to stop and assess how these collaborations are working and what can be done to move them forward toward success. This chapter offers a variety of assessment tools and strategies to evaluate the process and outcomes of collaborative research. Chapter 10 examines writing, presenting, and publishing collaborative research, including ways researchers can engage in different forms of collaborative writing. Issues surrounding writing collaborations are also addressed, and suggestions are made for overcoming challenges. Chapter 11, as the concluding chapter, discusses next steps for qualitative researchers wishing to contribute to the next round of research innovations made possible by collaboration. We invite you to enjoy this book and adapt what you need, and we hope that it inspires and encourages all researchers into conversations leading to enriching collaborative research.