The Broad Model of the Interdisciplinary Research Process

As discussed in Chapter 9, interdisciplinarians use several approaches to research, including contextualization, conceptualization, and problem centering, as well as the Broad Model. We said that the Broad Model has the advantage over these other approaches of being able to subsume them, as shown in Figure 10.2.

The Broad Model brings another advantage. It enables researchers in any interdisciplinary field or program to draw on disciplines from across the natural sciences, the social sciences, the humanities, the fine and performing arts, and the applied fields *regardless of their epistemological distance from each other* (see Figure 10.3).

Figure 10.2 The Broad Model as It Relates to Other Integrative Approaches

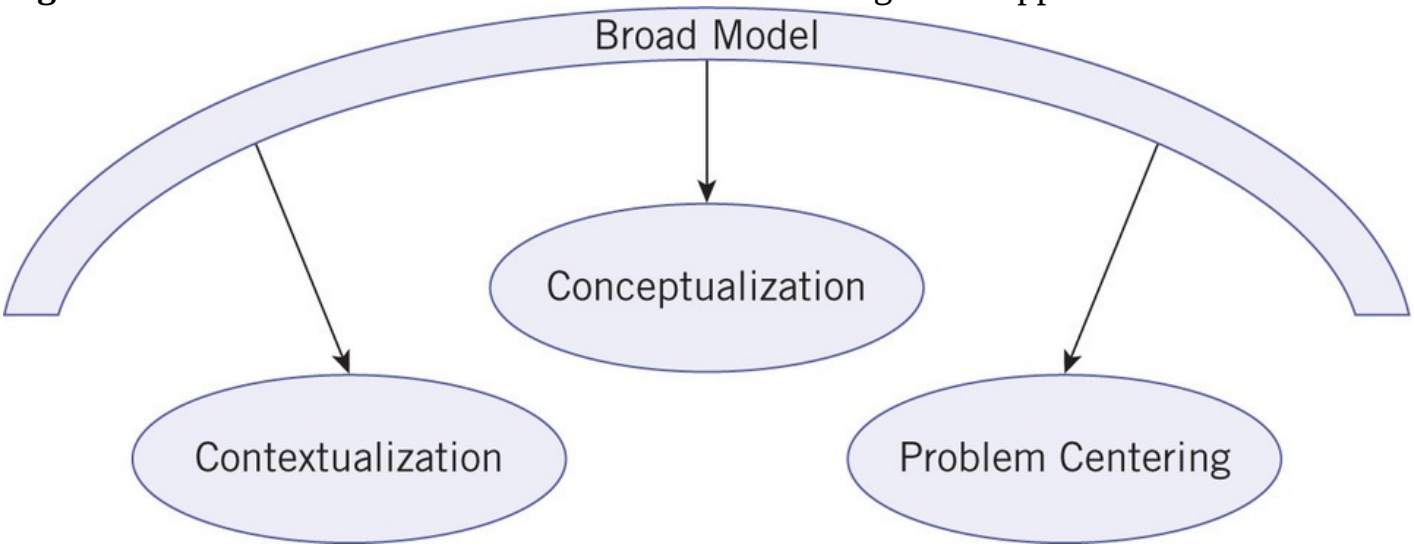
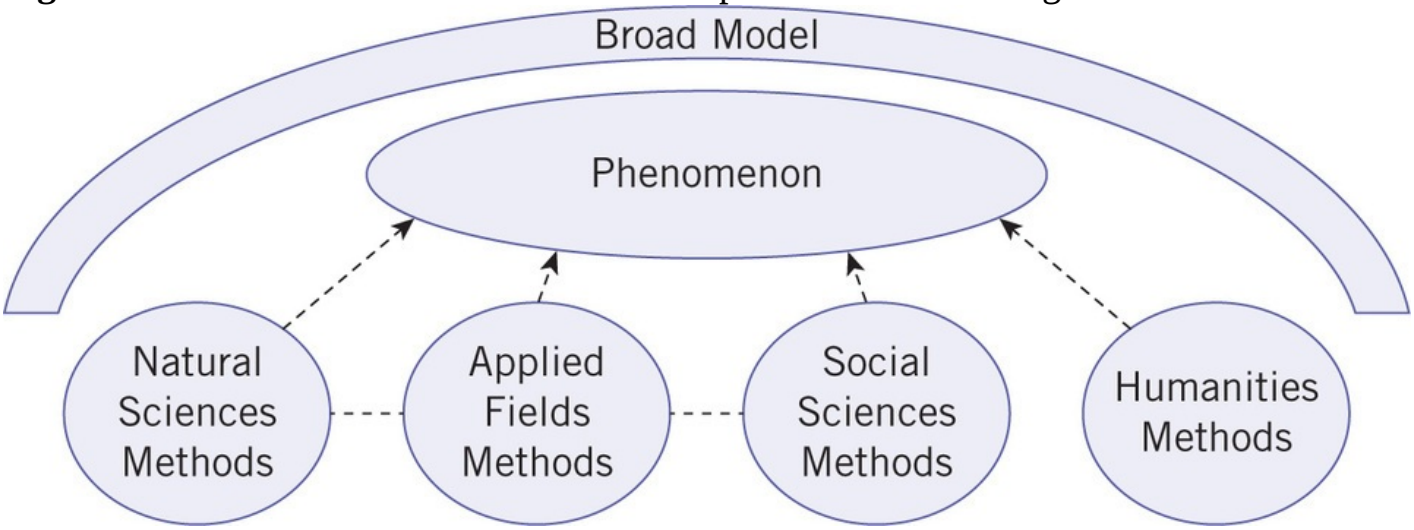


Figure 10.3 The Broad Model Draws on Disciplines From All Categories

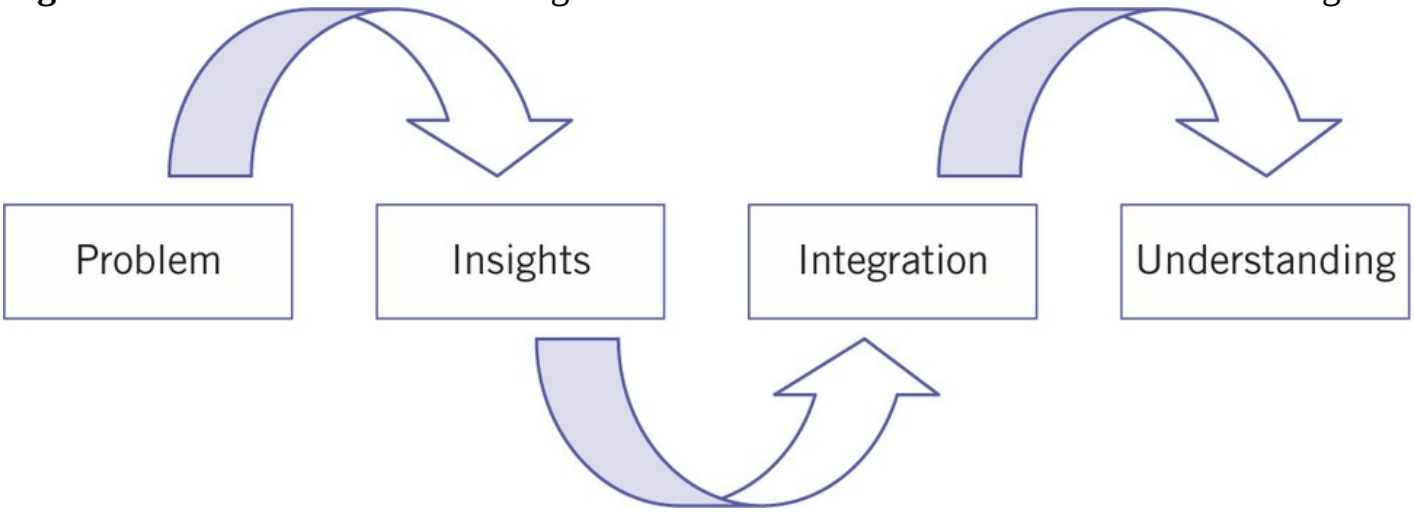


Source: Repko, A. (2012). Interdisciplinary Research: Process and Theory (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc. p. 72.

Note: The dotted lines connecting the Applied Fields to the Natural Sciences and the Social Sciences show that the Applied Fields (such as education, criminal justice, communication, law, and business) use research methods drawn from the Natural Sciences and the Social Sciences.

A third advantage of the Broad Model is that it portrays interdisciplinary research as a cognitive process that proceeds developmentally from problem to understanding, as shown in Figure 10.4.

Figure 10.4 The Broad Model's Cognitive Movement From Problem to Understanding



Source: Repko, A. (2012). Interdisciplinary Research: Process and Theory (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc. p. 73.

A further advantage of the Broad Model is that it provides an easy-to-follow road map of the interdisciplinary process consisting of step-like decision points (see Figure 10.5). Following the Broad Model is *not* a linear exercise similar to moving in a straight line from Point A to Point B without interruption (though this may be possible in some cases). Rather, following the Broad Model commonly involves reflecting on each STEP or decision point before moving on to the next STEP and may require that you revisit earlier STEPS to revise or complete your work.

Figure 10.5 The Broad Model of Interdisciplinary Process (Entry-Level Version)

STEP 1: Define the problem or state the research question.

STEP 2: Justify using an interdisciplinary approach.

STEP 3: Identify relevant disciplines.

STEP 4: Conduct a literature search.

STEP 5: Critically analyze the disciplinary insights into the problem and locate their sources of conflict.

STEP 6: Reflect on how the interdisciplinary process has enlarged your understanding of the problem.

By breaking down the research process into discrete STEPS, the Broad Model enables you to confidently perform each part while keeping the "big picture" in mind.

In this and the following chapters, our focus is to help you perform each of these STEPS yourself. We begin with STEPS 1 and 2.

STEP 1: Define the Problem or State the Research Question

What Is a Good Research Question?

A good interdisciplinary problem or research question must have these two qualities, each of which is discussed in the following:

- It must be complex.
- It must be researchable in an interdisciplinary sense.

A problem or topic is ripe for interdisciplinary study if it is complex. This means that it has multiple parts and that each part is studied by a different discipline. For example, the topic of terrorism is certainly complex and assumes many forms (e.g., domestic terrorism, suicide terrorism). Skimming the literature on one form of terrorism reveals its many aspects—historical, cultural, political, and religious—each of which is typically studied by a different discipline.

A subject is **researchable in an interdisciplinary sense** if experts from two or more disciplines have written about it. Conducting a preliminary search of academic databases will quickly confirm whether the subject is researchable. There are many problems that, at

first glance, appear to be admirably suited to interdisciplinary study but that, upon closer examination, are not. A topic may be “in the news” and the subject of heated public debate, but if scholars have not published research on it, then it is not appropriate for interdisciplinary study at the introductory level. Such was the case, for instance, when students wanted to investigate “the effects of physician shortages on rural communities.” The topic is complex and is certainly one that is important to society. But for whatever reason, it had failed to attract scholarly interest outside the field of medicine. In an introductory interdisciplinary course, therefore, the topic was not appropriate for study and had to be abandoned. On matters of public controversy, there is usually a “lag time” of several months or even years from when the issue surfaces to when scholars begin publishing their research on it.

How Do You Develop a Good Research Question?

A research question identifies the subject, problem, or behavior to be studied. It is generally stated in the form of a question, though sometimes declarative sentences are used to describe the problem to be investigated. One of the advantages for students of stating the research question as a question is that the question guides them to seek an answer rather than to simply describe the problem at hand. A well-thought-out interdisciplinary research question provides critical information to readers about your project and has these characteristics:

- It identifies the focus of the study in an easy to understand sentence or two.
- It defines the *scope* or boundaries of the study (i.e., “frames” the topic), and characterizes the study as an interdisciplinary one.
- It avoids three tendencies that run counter to interdisciplinary process (see below).
- It answers the “so what?” question.

The Research Question Identifies the Focus of the Study

The research question should state the focus of the study clearly and concisely. The following statement, for example, demonstrates lack of focus: “The majority of complaints registered by the Childcare Licensing Agency (CLA) concern unsafe childcare facilities.” It is unclear what the focus of the study is: the complaints (whether or not they are valid), the lack of enforcement of safety regulations by the CLA, the lack of funding of the CLA by the federal government, or the lack of legislation that establishes strict enforcement procedures. Assuming that the focus of the study is on unsafe childcare facilities, the sentence could be rewritten like this: “What are the causes of unsafe childcare facilities?”

The Research Question Defines the Scope of the Study

Scope refers to the parameters of what is included or excluded from the study. In other words, how much of this topic will be studied? What are the boundaries of the investigation? (Szostak, 2002, p. 105; Wolfe & Haynes, 2003, p. 140). For example, the subject of terrorism is very broad and the literature on it is vast, making it essential to narrow the scope of inquiry to something more manageable, such as the cause of some specific form of terrorism. The scope can be narrowed still further by limiting the study to a particular historical period or to some region of the world or to a specific country.

Though both disciplinarians and interdisciplinarians are concerned with the scope of the problems they study, they differ in how they think about scope. Interdisciplinarians are interested in conducting studies that reach beyond the confines of a single discipline, so they think of "scope" broadly. Disciplinarians, on the other hand, are concerned that the study stays within the confines of their discipline, so they think of "scope" narrowly. For example, if the problem under study is repeat spousal battery, how will this be approached? Disciplinarians will likely approach it from the narrow perspective of their discipline such that they will see it as a sociological problem or a psychological problem but not both. By contrast, interdisciplinarians will approach the same problem from multiple disciplinary perspectives and seek to integrate the relevant and conflicting disciplinary insights. Interdisciplinarians are concerned about making the "scope" of any study they undertake manageable, perhaps (in this example) by *narrowing* its focus to either the *causes* or *effects* of the behavior. It is common to narrow the focus of a study in this way when confronted with an unmanageable number of insights.

The Research Question Avoids Three Tendencies

In stating the research question, practitioners need to avoid three tendencies that run counter to interdisciplinary process: **disciplinary jargon, disciplinary bias**, and **personal bias**.

The research question should be free of *disciplinary jargon*. This refers to using technical terms and concepts that are not generally understood outside the discipline. If a technical term must be used, best practice calls for redefining the term or concept more broadly or generally so it is meaningful to each discipline. Here is an example of a statement that includes disciplinary jargon: "The recidivism of domestic battery is a significant problem in the United States because of its psychological effects on the victim." This statement contains two technical terms that require definition: *recidivism* and *domestic battery*. These terms are commonly used in social work, sociology, criminal justice, political science, and law but will likely be unfamiliar to those outside these fields.

The research question should be free of *disciplinary bias*. This refers to using language that connects the problem to a particular discipline. For example, the problem of freshwater scarcity in Arizona is connected to the discipline of political science in this statement of the

problem: “Partisan politics in the state legislature has prevented the passage of needed water conservation legislation.”

Returning to our hypothetical study of domestic battery, note that its focus is on the “psychological” effects on the victim of domestic battery. The reference to “psychological” suggests that the study is reliant on psychology, implying that information from other disciplines is unlikely to be included. If the student limits the study to the psychological effects of these behaviors, then a simple disciplinary (i.e., psychology) approach will do. But if the student intends the study to be interdisciplinary, then the reference to “psychological” should be dropped, or the statement should be broadened to include other effects on the victim beyond psychological ones.

There is a practical reason why the research question should be free of disciplinary bias. Connecting the problem to a particular discipline privileges that discipline over other relevant disciplines. This runs counter to the purpose of interdisciplinary work, which is to produce a more comprehensive understanding. The understanding cannot be comprehensive if one discipline and its perspective (including the discipline’s favored research method) dominate the study. In these circumstances, the interdisciplinary enterprise cannot succeed. Recall that the role of the interdisciplinarian is similar to that of a marriage counselor whose job is not to take sides but to impartially weigh the evidence submitted by both parties to the conflict.

Finally, the research question or statement of the problem should be free of *personal bias* or personal point of view of the problem as discussed in Chapter 4. While arguing a personal point of view is common in many disciplinary contexts, it runs counter to best practice in interdisciplinary contexts. The reason for avoiding personal bias is straightforward: The purpose of interdisciplinary work is to produce a more comprehensive understanding of the problem. Arguing a point of view at the outset of the study suggests to the reader that relevant insights that conflict with this viewpoint may be excluded, thereby rendering the study of little interdisciplinary value.

Note the author’s personal bias in this statement of the problem concerning the high failure rate among young NBA players: “Young NBA stars are not prepared to cope with the pressures of success.” The author obviously believes this and would prefer to write a paper advancing this point of view. However, the role of the interdisciplinarian is not to play either prosecuting attorney or defense counsel for the accused. The role of the interdisciplinarian is to achieve a more comprehensive understanding of the problem. Injecting personal bias at the outset of the study is normal in many disciplinary contexts but is inappropriate in interdisciplinary work. The simple reason is that the interdisciplinarian should be approaching the problem with a frame of mind that is decidedly different from that of the disciplinarian. That frame of mind is one of neutrality (or at least suspended judgment) until all the evidence is gathered and analyzed. This means being open not only to different disciplinary perspectives but also to their insights,

even if these insights happen to conflict with your personal views on the topic.

Challenge question: How might this question about young NBA stars be stated?

The Research Question Answers the "So What?" Question

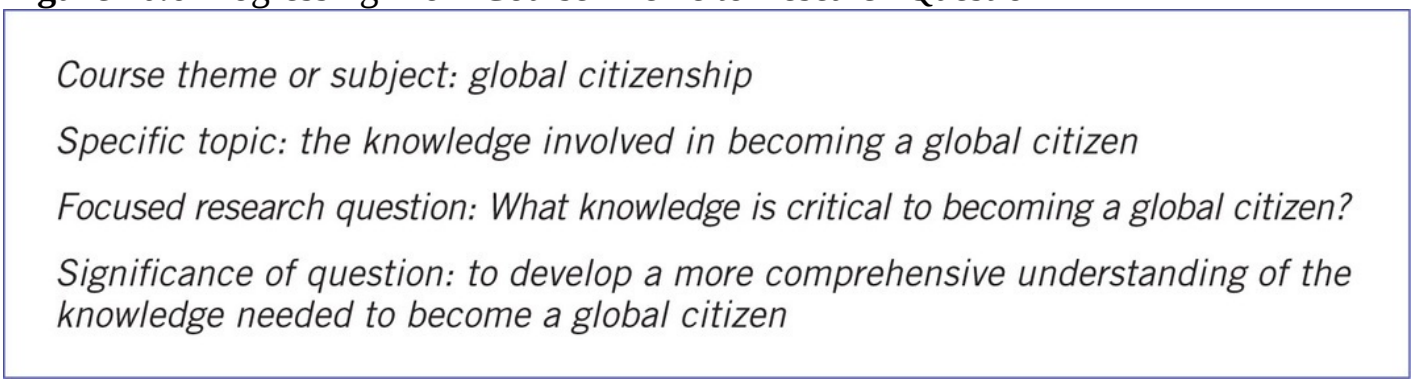
A fourth quality of a good interdisciplinary research question or problem statement is for it to answer the "so what?" question. This means explaining why we should care about the problem. To begin, write down multiple possible research questions or statements of the problem before selecting one or two to focus on. Here are some possible questions (not "so what?" questions) that can be asked about the course theme of global citizenship:

- What does the term *global citizenship* mean?
- What assumptions (or theories) underlie the concept of global citizenship?
- What values are associated with being a global citizen?
- How does becoming a global citizen affect my being a citizen of my country?
- What abilities must I develop to become a global citizen?

In applied social or policy research, the problem is often a practical one for which a solution is needed. So in your writing, be sure to complete this sentence: "I am seeking to answer this question *in order that* (or *so that)* . . ." (adapted from Remler & Van Ryzin, 2011, p. 499). You thus need to add a sentence or two of *motivation* to the sentence or two in which you articulate your research question.

By putting the suggestions for STEP 1 together, you have the following progression of thought, as shown in Figure 10.6, beginning with the course theme and ending with an answer to the "so what?" question.

Figure 10.6 Progressing From Course Theme to Research Question



Source: Adapted from Booth, Columb, and Williams (2008).